

DECISION NOTICE
and
FINDING OF NO SIGNIFICANT IMPACT
PIPELINE ENVIRONMENTAL ASSESSMENT

Bonners Ferry Ranger District
Kaniksu Working Circle
Idaho Panhandle National Forests
USDA Forest Service
Boundary County, Idaho

DECISION SUMMARY

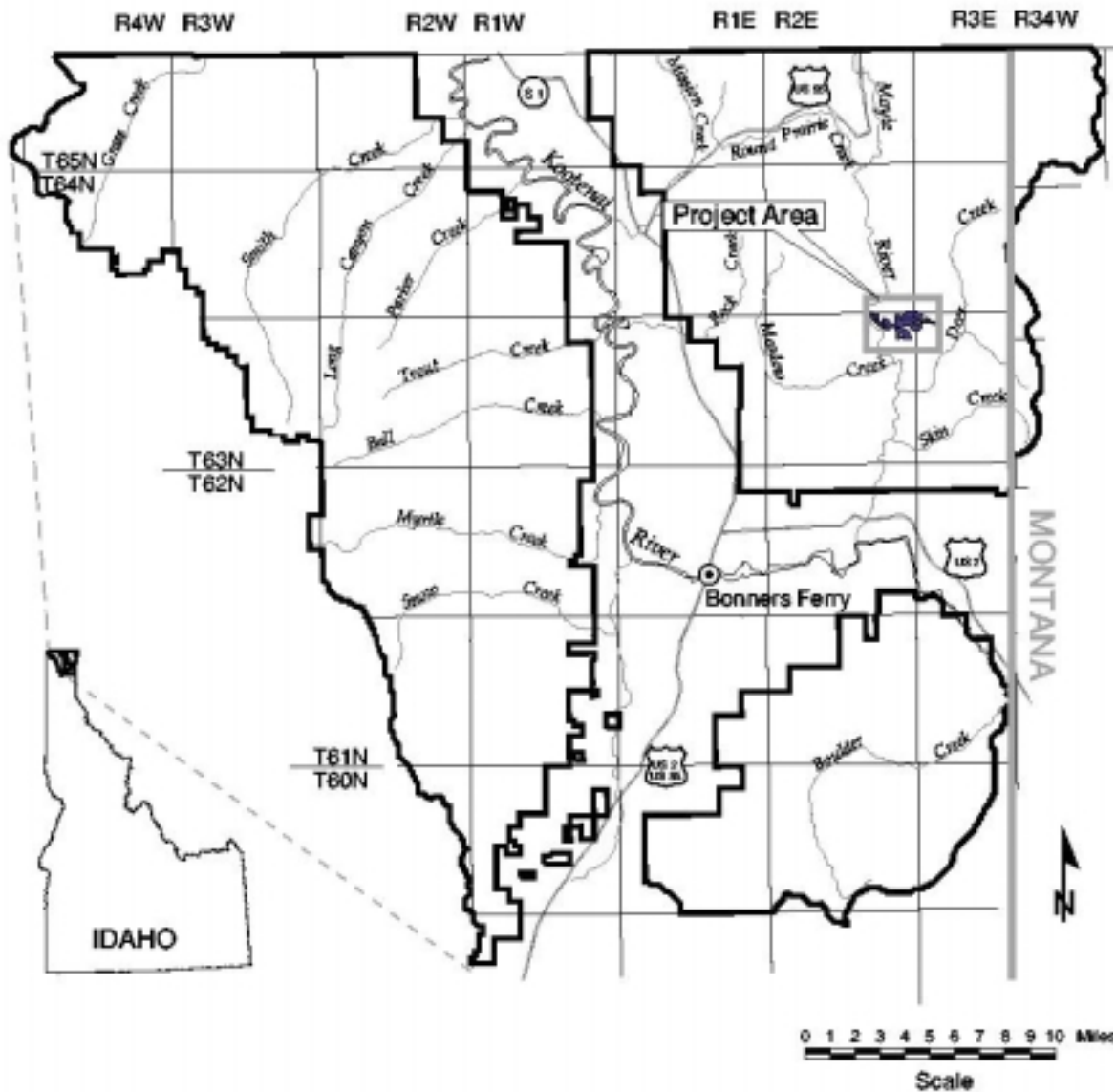
This decision Notice documents my decision to select Alternative 2 (Proposed Action) as described in the Pipeline Environmental Assessment issued in April 2001. The selected alternative includes approximately 555 acres of timber stand restoration treatments to be accomplished through timber harvest. The stand restoration treatments are designed to create stand conditions and associated wild life habitat, which occurred historically in the area. The project also includes about three miles of road reconditioning designed to improve fisheries by reducing existing sources of sediment. The Pipeline EA project area is located about 12 miles NE of Bonners Ferry, Idaho (See Figure 1.1 on the next page).

PROJECT BACKGROUND

The Pipeline EA project area has had increasing amounts of insect and disease mortality in the timber stands since 1992. Internal scoping about project opportunities started in May of 1997 and by July of 1998, a scoping Notice was sent out for public comments. By September 1998, two field trips were made with interested public to discuss the proposed activities in the project area. Through public and internal scoping the District identified two issues and developed five alternatives addressing the proposed action. These alternatives were analyzed and the effects disclosed in the Pipeline EA, which was sent out for public comment and review in January 2001. The decision described in this Decision Notice was made following a thorough review of the Environmental Assessment and the public comments received relating the EA.

Development of the Desired Future Conditions, Purpose and Need, and Proposed Action for the Pipeline EA used scientific findings and conclusions from landscape analysis documents such as the Interior Columbia Basin Ecosystem Management Project (ICBEMP) and the more site specific North Zone Geographic Assessment (NZGA). Development of this EA follows implementing regulations of the National Forest Management Act (NFMA); Title 36, Code of Federal Regulations, Part 219 (36 CFR 219); Council on Environmental Quality, Title 40; Code of Federal Regulations, Parts 1500-1508 (40 CFR 1500-1508); National Environmental Policy Act (NEPA); and is tiered to the Forest Plan Final Environmental Impact Statement (1987). This analysis incorporates direction and guidance provided in the Idaho Panhandle National Forests Plan EIS, Record of Decision, and Forest Plan (1987), and as amended by the Inland Native Fish Strategy EA and Decision Notice (1995) (INFS).

Figure 1-1
Pipeline EA Vicinity Map



Pipeline Environmental Analysis Highlights

- Scoping for the Pipeline EA began in July 1998.
- The District Ranger, Project Forester, and local landowners visited the Pipeline EA project area during two separate field trips. Topics covered included forest health, urban interface fire danger, wildlife habitat, prescribed fire, logging truck haul routes and dust abatement.
- There are no Threatened or Endangered Species (Flora or Fauna), their habitat, or their Recovery Zones in the project area.
- No archeological sites exist in the project area.
- No old growth exists in the project area.
- There are no roadless, or proposed roadless areas located within the project boundaries.
- No new roads will be constructed.
- The Pipeline project area encompasses a Disabled Hunter Access Area that is open during deer /elk rifle and archery season.
- Issues and alternatives for the EA were developed using discussions from interested agencies, public comments and direction from the following documents:
 - Forest Plan
 - Inland Native Fish Strategy (INFS)
 - State of Idaho Best Management Practices (BMP)
 - Scientific Analysis from the Upper Columbia River Basin EIS
 - Ecosystem Management documents.
- Two issues were used to develop alternatives, Forest Health trends, and Big Game Winter Range.
- If any action alternative is implemented, a timber sale road package will replace old culverts, upgrade retaining walls, and install more cross drains on the Deer Ridge Road (Road number 2540), resulting in a reduction of sediment delivery to Placer Creek and a net benefit to the watershed. See the watershed report in Appendix B for more information.
- The culvert on the Placer Creek Connection / Deer Ridge Road junction (Road number 2540 with 2541) would be upgraded to a fish passable crossing. See Road and Stream crossing map – crossing #11 in Appendix B, page B-65.

DESIRED FUTURE CONDITION (GOALS)

Based on observations made in the field by forest entomologists, concerned public citizens and responses from the Pipeline scoping letter, the following goals for the EA have been developed. The Desired Future Condition (DFC) or Goals for Pipeline EA are designed to address forest health concerns, big game winter range, and the threat of wildfire(s) in an urban interface setting. Supporting documents such as the Forest Plan are listed on page 1-9 of the EA.

- 1) Trend timber stand characteristics toward levels within their Historical Range of Variability (HRV). The definition of HRV is on page 1-10.
- 2) Increase the quality and quantity of big game winter range.
- 3) Reduce the intensity of wildfires to National Forest and adjacent private lands.

PURPOSE AND NEED (OBJECTIVES)

The purpose and need, or objectives, for entering the Pipeline EA project area is to improve forest composition, structure, and diversity of the landscape by providing for tree species and stocking levels similar to historic levels that better resist insects, diseases, wildfire, and that wildlife are adapted to. More specifically:

- Reduce the number of trees per acre, and favor the development of large diameter ponderosa pine and larch on dry forest types.
- Reestablish white pine as a significant component of its historic range.
- Reduce the overmature lodgepole pine component in stands where this species is currently susceptible to mountain pine beetle infestations.
- Improve the diversity of forest structures in the area, including larger patch sizes with less fragmentation. This will provide for wildlife, fish, and plant habitat diversity and security. The project area contains stands that are relatively similar in size and age, and therefore, not providing a wide range of wildlife habitats.
- Improve cover and forage conditions on big game winter range.
- Reduce the sediment risk associated with stream crossing failures.
- Reduce the production and delivery of sediment from road surfaces and ditches.

The proposed activities are designed to improve forest health within the project area by maintaining a diverse, productive and sustainable forest. A sustainable healthy forest can be maintained by keeping natural processes intact and interacting in the same way the forest ecosystem evolved.

PROPOSED ACTION

The proposed action would trend about 555 acres toward conditions within the Historical Range of Variability (HRV). For more information on HRV, see page 1-11 in the EA. Timber harvest, prescribed burning, mechanical treatments, and precommercial thinning would be used to meet the stated purpose and need (reduce the number of trees per acre in ponderosa pine forests, re-establish white pine, improve wildlife habitat, etc.). The focus of each timber sale unit would be based on the desired condition after management rather than the quantity of products removed from each unit. In fact, in some cases there would be no removal of forest products, such as in the ecosystem burn (see Chapter 2).

The proposed action is to:

- 1) Trend approximately 555 acres towards more open grown stands of larger diameter, fire resistant tree species such as Ponderosa pine and Larch. These activities would begin to establish the stand characteristics that fire would have naturally created on these sites.
- 2) Reestablish White pine as a major stand component by implementing silvicultural prescriptions such as: salvage, sanitation, commercial thinning, shelterwood, and seed tree harvesting.
- 3) Use prescribed fire and machine piling to reduce fuel loadings, prepare seedbeds, and encourage forage production for big game.
- 4) Use the existing road system.

SCOPE OF DECISION

I am the Responsible Official for the decisions outlined in this Decision Notice. The Environmental Assessment and public involvement formed the basis for my reasoned decision on management of forest resources in the project area. The scope of my decision(s) is limited to the actions described in the EA and in this Decision Notice.

The decision(s) to be made are:

- ☐ whether to select the proposed action or another alternative;
- ☐ the methods that would be used to implement the selected alternative;
- ☐ when the activities would take place;
- ☐ whether to conduct project-related activities;
- ☐ use of monitoring or mitigation activities.

PUBLIC INVOLVEMENT

Initial scoping and public involvement during field trips is discussed on page 6-1 of the EA. Several comments were received from local landowners, environmental groups, and the Idaho Fish and Game.

On 1/6/01, the Pipeline EA was sent out for comments. The only comments received to date have been from environmental groups, and a Letter of Concurrence from the Idaho Fish and Game. The environmental groups supplied comments that were broad in scope, contentious, and not site specific in nature. Some of the concerns were in regard to watershed condition, the use of prescribed fire, various wildlife species, noxious weeds, and old growth, among others. For details, refer to the "Response to Comments" attached to this document.

Based on comments from the Idaho Fish and Game:

- The Aspen slashing K-V project will include selecting of trees to be left in the aspen stands based on consideration of other wildlife values, as well as forage for big game animals.
- Replacing culverts on Placer Creek will be after July 1; to reduce potential sediment related impacts to cutthroat spawning habitat.

ISSUES

The issues and comments brought up during internal and public scoping identified issues used to develop the alternatives and any needed mitigation.

Forest health trends, stand structure, stand composition, insect and disease concerns, fire risk, and wildlife habitat (white-tailed deer winter range needs) drove development of Alternatives 2 and 3. Considerations in unit design, harvest methods, silvicultural treatments, logical burn boundaries, the poor condition of Deer Ridge Road and project-related activities were integrated into the overall project design and narrowed the complexity of the project.

ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER STUDY

1). Maximum Timber: This alternative is based on the IPNF's Forest Plan, which emphasizes regeneration type harvesting. A silvicultural diagnosis was conducted for the entire Placer Creek watershed and nearly *4300 acres* were identified as needing some sort of treatment (see map on page 11). Under this alternative, the treatments would be a combination of regeneration harvests (clearcut, seed tree and shelterwood), as well as thinning and salvage harvesting.

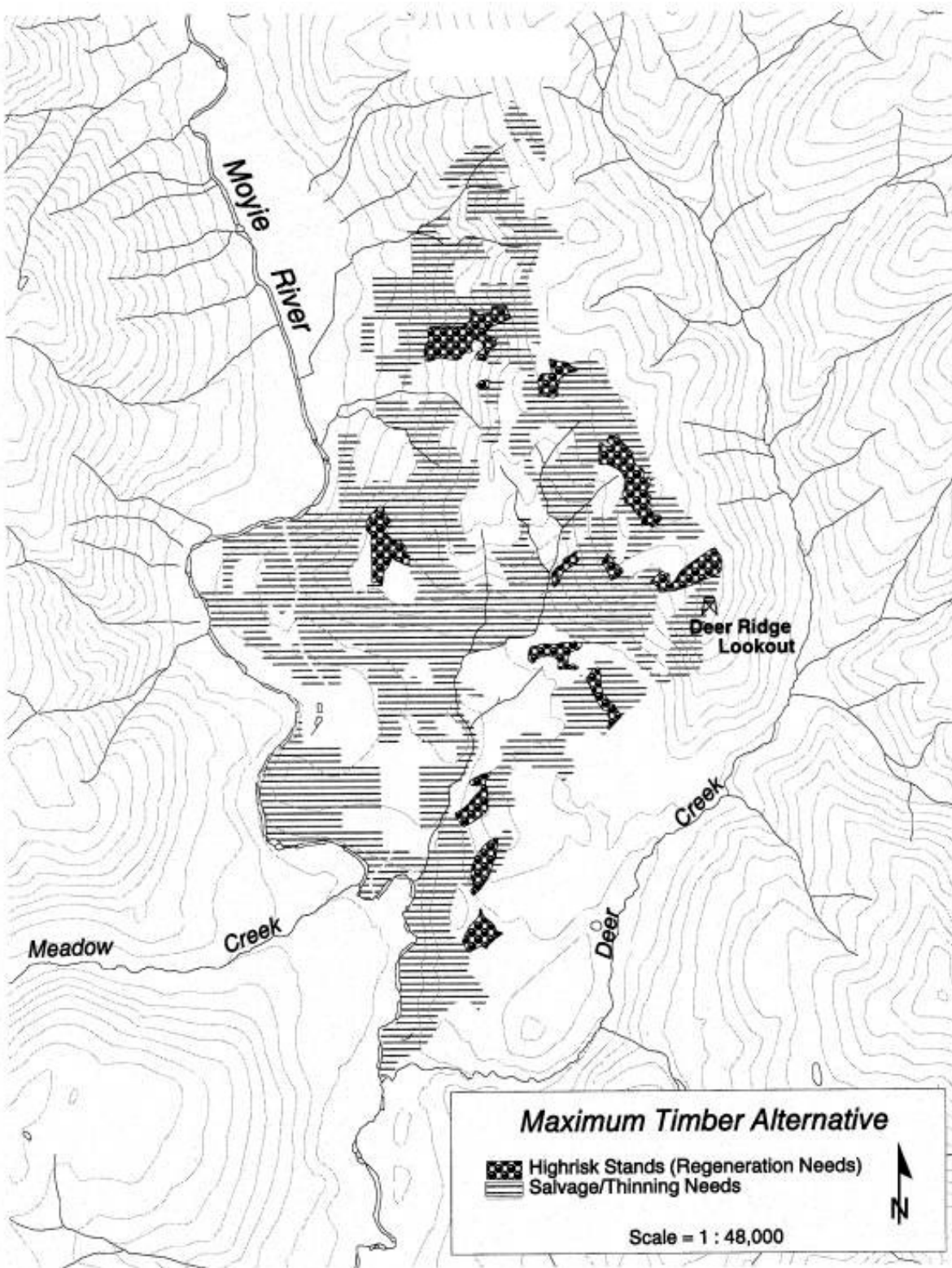
This alternative was dropped from further analysis because extensive road building would be required to access the "High-risk Stands" portrayed on the map on page 8. After considering other constraints such as: watershed, Lynx habitat, and roadless issues, it was not reasonable. Therefore, it was eliminated from further study.

2). Other Than Timber Harvest: This alternative evaluates the potential treatments, other than timber harvest, that would meet the stated goals and objectives. Two methods were considered to accomplish this, both of which introduced fire back into the stands.

- a) Prescribed burning without fuels treatment: This method would only use prescribed fire to treat the stands without any site preparation work. Burning intensities would need to be hot enough to kill the majority of the seedling and sapling sized trees, and about a quarter of the pole and saw log sized trees. For a burn like this to be effective, the weather and fuel conditions would have to be very dry. It is obvious, when considering the amount of private land adjacent to the stands, that it would be much too risky with a very high potential for an escaped wildfire and disaster.
- b) Prescribed burning with fuels treatment: This method includes some felling of the unwanted sapling trees to create a light continuous fuelbed, followed up by prescribed burning. This could be done under moister conditions than the first method, however, with the acres involved, and the proximity to private lands, this would still be very risky.

Both prescribed burning methods, regardless of success rates, would produce smoke well in excess of any of the timber harvest alternatives, risk losing the entire organic duff layer (which is shallow) in these stands, and would waste wood fiber that could be utilized as products.

Maximum Timber Alternative



ALTERNATIVES

The following three alternatives address the Purpose and Need, Desired Future Conditions, and Proposed Action to varying degrees using the two driving issues of *forest health* and *big game winter range*; of which both were declining in quality in the project area.

Alternative 1 - No Action

- As required by NEPA- this is a No Action “no change in current management” alternative.
- Implementation of this alternative would defer timber harvest activities, winter range habitat improvements, fuel reduction activities, and associated Knutsen-Vandenburg (KV) projects.
- Current management activities such as spraying weeds, handicapped hunter access, and KV projects associated with ComplacerC timber sale of 1992 would continue.

Alternative 2 – Proposed Action

*Designed using big game winter range and forest health issues. Trends stand attributes towards values within their respective HRV. **Blends big game cover/forage areas across the project area.***

- These actions are in addition to “Features Common to All Action Alternatives” section.
- Implements timber harvesting in ten units, spanning approx. 555 acres.
 - Silvicultural prescriptions include salvage, commercial thinning, shelterwood and seed tree cuts.
 - Road rehabilitation work would take place on Deer Ridge road.
 - No new roads would be constructed.
 - An Ecosystem Burn of approximately 130 acres would be implemented.

Alternative 3 – Modified Proposed Action

*Designed using big game winter range and forest health issues. Trends stand attributes towards values within their respective HRV. **Emphasizes regeneration harvesting and boosts the forage base for big game, however, this is at the expense of their thermal cover.***

- These actions are in addition to “Features Common to All Action Alternatives” section.
- Implements silvicultural prescriptions such as seed tree and shelterwood harvest cutting to regenerate Ponderosa pine, White Pine and Larch.
 - Unit shapes and sizes would be the same as Alt. 2, totalling approximately 555 acres. Also, Units 2,5,7,10 would be **regenerated** with shelterwood or seed tree cuts instead of salvaging or thinning in these Units that total roughly 236 acres.
 - Road rehabilitation work would take place on Deer Ridge road.
 - No new roads would be constructed.
 - An Ecosystem Burn of approximately 130 acres would be implemented.

Legend

- Roads
- Existing Regeneration Units
- Alternative 2 Silvicultural Treatment Units
- Commercial Thin
- Commercial Thin / Sanitation Salvage
- Seed Tree
- Shelter Wood
- Ecosystem Burn

Scale 1:24,000

Legend

- Roads
- Existing Regeneration Units
- Alternative 3 Silvicultural Treatment Units
- Seed Tree
- Shelter Wood
- Ecosystem Burn

Scale 1:24,000

Alternative 2 (Proposed Action) is the Preferred Alternative because it is more *balanced* than either Alternative 1 (No Action), or Alternative 3 (Modified Proposed Action). Alternative 1 would do nothing to meet the purpose and need, while Alternative 3 would regenerate all of the timber stands in the project area and leave little thermal cover for big game in the harvest Units. For more details, look under the Selected Alternative heading on page 16 of this document.

ENVIRONMENTAL CONSEQUENCES

Alternative 2 Compared to Alternative 3: The primary difference in effects between the two action alternatives lies in tradeoffs between the cover/forage ratios and the distribution of cover across the project area. The following table summarizes the differences.

Comparison of Alternatives to Issues of Forest Health and Big Game Winter Range

	<u>Alt 1</u>	<u>Alt 2</u>	<u>Alt 3</u>
Acres left untreated (No Action)	555	0	0
Forest Health Issue			
Acres trended toward HRV - using <i>regeneration</i> * harvesting - with underburning	0	320	555
Forest Health Issue			
Acres trended toward HRV - using <i>intermediate</i> * harvesting - no underburning	0	235	0

	<u>Alt 1</u>	<u>Alt 2</u>	<u>Alt 3</u>
Big Game Winter Range Issue			
Acres of <i>forage</i> created - using <i>regeneration</i> harvesting - with underburning	0	320	555
Big Game Winter Range Issue			
Acres of <i>cover</i> maintained - using <i>intermediate</i> harvesting - no underburning	0	235	0

- * - Regeneration harvesting = seed and shelterwood cuts.
- Intermediate harvesting = commercial thinning and sanitation salvage cuts.
See Silvicultural definitions Appendix C in the EA.

Alternative 2: Addresses the forest health issue by regenerating 320 acres (Units 1, 3, 4, 6, 8, 9) and thinning 235 acres (Units 2, 5, 7, 10). Regeneration cutting “quickly” trends a stand toward the HRV because it removes the dead and dying trees, most of the shade tolerant trees such as Douglas-fir and grand fir, and creates conditions favorable for desirable shade intolerant trees that are abundant within the HRV such as ponderosa pine, larch and white pine. The intermediate treatments still trend the 235 acres toward the HRV, but would do so in a slower two-step process, deferring the regeneration of Units 5 and 10. Alternative 2 addresses the big game winter range issue by salvaging and thinning in Units 2, 5, 7 and 10; leaving a mosaic of cover and forage within the project area and keeping the 13 acres of critical deer winter range in Unit 5 intact. The regeneration of Units 2, 5, 7 and 10 would take place after 15 -20 years, when Units 1, 2, 4, 6, 8, and 9 have regenerated and are out of opening status. This “area regulated” management style would keep a mosaic of stands in different stages of development across the project area at any give time, however, numerous entries would be needed over time to maintain this “diversified portfolio” of stands.

Alternative 3: Addresses the forest health issue by regenerating all of the units and “quickly” trends them toward conditions within the HRV. This “pulse disturbance” management style concentrates management activities to a narrow time period and mimics the effects of fire(s) that historically burned through the area in that all but the larger trees would be removed and the stands regenerated to desirable, fire tolerant species, such as ponderosa pine, larch and white pine. The next entry into project area would not be for 5-10 years for overstory removals and precommercial thinning opportunities. Alternative 3 addresses the big game winter range issue by creating abundant forage (555 acres), however, it does not leave a mosaic of cover and forage in the project area as proposed with Alternative 2.

Comparison of Alternatives - Issues of Forest Health and Big Game Winter Range

<u>Issue</u>	<u>Alt 1</u>	<u>Alt 2</u>	<u>Alt 3</u>
Forest Health in relation to HRV.	Declining forest health, trending away from HRV.	Improved forest health, trending toward HRV. Mix of regeneration harvesting and thinning.	Much improved forest health, trending toward HRV. <i>Exclusive</i> use of regeneration harvesting
Big Game Winter Range (Percent of acres in project area)			
- Cover	90%	70%	56%
- Forage	10%	30%	44%

<u>Silvicultural System</u>	<u>Alt 1</u>	<u>Alt 2</u>	<u>Alt 3</u>
Seed Tree	0	33	33
Shelterwood	0	284	522
Commercial Thin	0	42	0
Commercial Thin/Sanitation Salvage	0	194	0
<u>Totals</u>			
Acres in Regeneration Harvest	0	319	555
Acres in Intermediate Harvest	0	236	0
Ecosystem Burning (- recommended KV project)	0	130	130
TOTAL ACRES TREATED	0	685	685

Project area is approximately **1,130 acres**.

<u>RESOURCE</u>	<u>ALT 1</u> No Action	<u>ALT 2</u> Proposed Action	<u>ALT 3</u> Modified Proposed Action
<u>Forest Health Trend</u> <ul style="list-style-type: none"> Trend in stand conditions with respect to the Historical Range of Variability (HRV). Forest ecosystem's resilience to disturbances such as insects, disease, and fire. 	Trend <i>away</i> from HRV. Decrease in resilience.	Trend toward HRV. Increase in resilience.	Trend toward HRV. Increase in resilience.
<u>Big Game Winter Range Trends</u> <ul style="list-style-type: none"> Quality and quantity of forage for winter browse. Number of animals surviving the winter. Social demand for viewing / hunting wildlife 	Declining conditions. Fewer Declining viewing conditions.	Increase Increase Improved viewing conditions.	Increase Increase Improved viewing conditions.
<u>Fire Trends</u> <ul style="list-style-type: none"> Risk of urban interface wildfire. Risk of stand replacement fire with associated damages to soils, vegetation, wildlife and fish habitat. Trend in fire intervals (using prescribed fire) with respect to HRV. 	Increasing Increasing Trend <i>away</i> from HRV.	Reduced Reduced Trend toward HRV.	Reduced Reduced Trend toward HRV.
<u>Aquatic Habitat Conditions and Trends</u> <ul style="list-style-type: none"> If any action alternative is implemented, a timber sale road package will replace old culverts, upgrade retaining walls, and install more cross drains on the Deer Ridge Road (Road number 2540), resulting in a reduction of sediment delivery to Placer Creek and a net benefit to the watershed. See the watershed report in Appendix B in EA for more information. The culvert on the Placer Creek Connection / Deer Ridge Road junction (Road number 2540 with 2541) would be upgraded to a fish passable crossing. See Road and Stream crossing map – crossing #11 in Appendix B, page B-65, in EA. 	No No	Yes Yes	Yes Yes

PUBLIC COMMENTS

Scoping is an integral part of the environmental analysis process and was used to identify issues associated with the proposed action. Elements of scoping include establishing the depth of analysis needed, initiating public involvement, identifying environmental issues, selecting an interdisciplinary team, exploring possible alternatives and their effects, and making task assignments (FSH 1909.15, Chapter 10).

The Pipeline EA was initiated to find out why so many trees in the project area were dying. Two field trips were conducted with the forest entomologist / pathologist. One trip was in 1992 and another in 1998. The trip findings concluded that the forest health is *poor* overall from overcrowded timber stands and that insects and disease mortality was on an increasing trend. Detailed trip reports are located in the Pipeline project folder.

Public scoping for this project was initiated July 14, 1998. A scoping letter was mailed to individuals and agencies (including the Kootenai Tribe of Idaho) on the IPNF's Quarterly Schedule of Proposed Actions, and adjacent landowners, informing them that an EA to address vegetation management needs in the Pipeline project area (Placer Creek) was being prepared.

The returned public comments ranged from “We want all commercial logging stopped on National Forests” to “Amen, it’s about time something was done about those dying trees, please get them before they are only good for pulp”. Most comments were neutral in nature and they just wanted to stay on the mailing list for the Quarterly Reports.

Landowners who live near the Project area, the District Ranger, and Project Team Leader visited the Pipeline project area on September 22, 1998.

The proposal included forest health and big game winter range as *driving issues* to treat roughly 350 acres with salvage logging and group selection cuts. At this time the project was titled the Pipeline *Salvage* Environmental Assessment (EA) and the assessment area encompassed nearly 800 acres.

In October 1999, the assessment area was increased from 800 to 1,100 acres with the proposed treatment area increased from 350 to 555 acres, and the project was renamed the Pipeline EA. The larger analysis area allowed the ID team to use broad *ecosystem management* styles to address the forest health and big game winter range issues.

The additional acreage added to the analysis area did not border any more private land nor did the driving issues for the proposal change. Therefore “rescoping” was not carried out.

RESPONSE TO PUBLIC COMMENTS

On 1/6/01, the Pipeline EA was sent out for comments. The only comments received to date have been from environmental groups, and a Letter of Concurrence from the Idaho Fish and Game. To the best of my knowledge, none of the environmental group member(s) has visited the project area since the project inception in 1998. The environmental groups supplied comments that were broad in scope, contentious, and not site specific in nature. Some of the concerns were in regard to watershed condition, the use of prescribed fire, various wildlife species, noxious weeds, and old growth, among others.

Based on comments from the Idaho Fish and Game:

- The Aspen slashing K-V project will include selecting of trees to be left in the aspen stands based on consideration of other wildlife values, as well as forage for big game animals.
- Replacing culverts on Placer Creek will be after July 1; to reduce potential sediment related impacts to cutthroat spawning habitat.

For details, refer to the “Response to Comments” attached to this document.

THE SELECTED ALTERNATIVE

Alternative 2 (proposed action) is the selected alternative for the Pipeline EA. It is my decision to adopt Alternative 2 in order to implement management actions on these National Forest lands. Alternative 2 will implement stand restoration treatments over approximately 555 acres of the project area, implement a road package on the Deer Ridge Road and also include the “Features Common to All Alternatives” from Chapter 2 in the EA. Mitigation specifications are included by resource and listed below.

Features Common to All Action Alternatives

Silviculture

- 1) To maintain open Larch and Ponderosa pine forests containing larger trees that were historically associated with these sites. Longer rotation ages of 100-200 years will be used when even-aged harvest systems are applied. Rotation ages will be documented in the silvicultural prescriptions for each of the stands.
- 2) All standing non-merchantable dead trees will be retained (except those that are hazardous to logging operations) for snag dependent wildlife and large woody debris recruitment. A snag analysis for the Pipeline project area was conducted and, as a whole, the area exceeds standards in the *Regional Snag Management Protocol of January 2000* for snags. The District will continue maintenance of these standards by leaving a range of 6 – 12 snags/replacement snags per acre (depending on habitat type) throughout areas proposed for timber harvest. Large diameter (14”+ d.b.h.) Ponderosa pine, larch and Douglas-fir will be left for snag dependant wildlife species and for large woody debris recruitment. Snags will often

be left in clumps with green leave trees around them to protect them from becoming a safety issue during felling operations.

- 3) Weed and release treatments (KV) will be used to adjust tree species compositions in the existing regeneration units that were created in the 1980's. No cutting will be conducted within Riparian Habitat Conservation Areas (RHCAs). All slash will be removed from road ditch lines. Another KV project involves the Aspen clumps in Unit 5. Based on comments from the Idaho Fish and Game, the aspen slashing K-V project will include selecting of trees to be left in the aspen stands in consideration of other wildlife values, as well as forage for big game animals.

Slash and Natural Fuels

- 1) A variety of slash disposal methods will be utilized: underburning, grapple piling, yarding tops, and lop/scatter. To provide for soil nutrients, enough slash will be left in various sizes, to meet coarse woody debris guidelines established by Graham et al (1994) for each given habitat type. Optimally, the slash (except for landing slash) will be allowed to cure for at least six months, prior to any mechanical disposal activities, to allow enough time for the bulk of nutrients to leach from the foliage into the soil (Bruna 1994). The decision to use a particular method will be based on individual stand objectives.
- 2) All landing slash and any scattered grapple piles will be burned after completion of all sale related activities to reduce the risk of accidental ignition during dry periods of the year. They will be burned in the late fall when the risk of escape into adjoining stands and damage to the residual timber is reduced.
- 3) The "Ecosystem burn" if funded, would be carried out in conjunction with site preparation underburns in adjacent harvest units.

Soils

- 1) Specifications found in the Region One Soil Quality Standards (revised Feb 7, 2000) would be followed. A cumulative effects report (new information) attached to this Decision Notice describes the existing condition of the soil resource in the Pipeline EA. In order to meet or exceed the Region One soil quality standard of 15% or less detrimental soil compaction per Unit, the Bonners Ferry Ranger District minimizes impacts to the soil resource by implementing the following practices.
 - Use existing skid trails and landings where feasible.
 - In units with 10% or less detrimentally disturbed soils, where terrain is conducive, space any new trails 100 feet or more apart, except where converging.
 - When winter conditions on site consist of two or more feet of snow and/or frozen ground, skid trails may be as close as 100 feet apart.
 - Burn only when soil moistures are greater than 25 percent.

- 2) Ground based and cable-yarding systems will be used to implement the stand treatments. Specific equipment used will be agreed upon by the purchaser and the FS sale administrator depending on factors including, but not limited to, resource protection, economics, and current and future access needs.
- 3) To reduce soil compaction and displacement and to protect residual crop trees, existing and/or designated skid trails will be required for all ground-based and cable yarding operations (Froehlich, Aulerich, and Curtis, 1981).
- 4) Unit design and location will facilitate logging with a minimum amount of new skid trails. If, by chance, any excavated trails are constructed, they will be kept to a minimum and will be obliterated by the purchaser following completion of logging activities. Organic debris will be placed on top of the obliterated prism to facilitate revegetation.
- 5) Implement site-specific soil and water conservation Best Management Practices for units and roads to meet or surpass the level of Idaho State Best Management Practices for soil and watershed protection (all action alternatives). Site-specific practices that meet or exceed Clean Water Act standards will be incorporated into the timber sale contract.
- 6) The existing condition of detrimental soil compaction was established with soil surveys, monitoring by the soil scientist would occur in the project area after treatments to study changes in detrimental soil compaction, if any.

Fisheries

- 1) Management measures in the Inland Native Fish Strategy (INFS) are applied to all proposed or new projects and activities. This strategy is intended to reduce the risk of population loss and potential negative impacts to aquatic habitat. INFS standards will be applied to all activities within the project area.
- 2) Any changing of hoses, parts, or refueling will be conducted at least 300 feet away from streams and tributaries. A pre-operational inspection will be conducted by the Forest Service sale administrator for signs of leakage on machines that will be used to reconstruct stream crossings or place in-stream wood structures. The operator will inspect hoses daily for signs of wear. In the event any leakage or spillage enters any stream or open water, the operator will immediately notify the Contracting Officer Representative (COR) who will be required to follow the actions to be taken in case of hazardous spill, as outlined in the Forest Hazardous Spill Contingency Plan. A possible effect will be the damage to water quality should a leak of petroleum products or hydraulic fluids occur. As long as the above BMP is followed, impacts to downstream water quality are not likely.

Sensitive Plants

- 1) Any sensitive plants identified during project implementation will be evaluated. Any occurrences deemed critical to population or species viability will be protected by project design. Any proposed future salvage will be evaluated for suitable sensitive plant habitat and surveyed as necessary. Again, any occurrences deemed critical to population or species viability will be protected by project design.
- 2) Suitable habitat for the proposed threatened species Spalding's catchfly (*Silene spaldingii*) would be surveyed prior to project implementation. If populations are identified in proposed harvest units, Timber Sale Contract provisions would be implemented as necessary to protect the populations and their habitat.

Roads

- 1) A road package will be included with this project for road improvement, reconstruction, and maintenance. The site-specific BMP criteria listed in the back of the Watershed report (Appendix B) must be applied during project implementation.

Noxious Weeds

- 1) Identified existing weed infestations within the project area would be treated according to guidelines established in the Bonners Ferry Weed Control Projects EIS and Record of Decision (ROD) (USDA 1995).
- 2) The contract clause for Noxious Weed Control would be used to require cleaning of all off-road equipment *before and after* working in the Sale Area.
- 3) Contract provisions would be used to treat haul routes and landings in the project area for noxious weeds.
- 4) All reconstructed roads, and other areas of ground disturbance such as landings and skid trails, would be seeded with a weed free native and desired non-native seed mix and fertilized as necessary as soon after site disturbance as is practical.

Wildlife

- 1) See timing restrictions (4/1 – 7/31) for the Northern Goshawk and Harlequin Duck for proposed Unit 1 in the wildlife report in Appendix B.

Other

- 1) Assure protection of any encountered cultural sites, survey monuments, landlines, and other improvements by buffering or appropriate clauses in the timber sale contract, or both.
- 2) Throughout the project area, small amounts of blowdown and pockets of insect and disease may occur outside of the harvest units. This timber would be removed as long as it could be taken from existing access, and the action is consistent with all the mitigation and environmental concerns outlined in this document.
- 3) Proposed regeneration Units 1, 4, and 6 are each larger than 40 acres. Using ecosystem management principles, treating entire stands, regardless of size, allows the forest manager to blend harvest units into ridgetops, roads, existing regeneration units, and riparian areas. When an entire slope can be logged and underburned, visual standards can be met and those stands at a high risk of burning can be dropped to very a low risk. Removing the majority of the understory trees and *leaving* the large diameter ponderosa pine, larch, and Douglas-fir in the regeneration units would reduce the stand replacement fire risk on the private land interface. Future fire intensities would be greatly reduced; confining fires to the litter layer and understory vegetation at ground level. Treating areas larger than 40 acres blocks would also create stands more in line with historic conditions regarding pulse disturbances, patch size, and shape considerations. All of the units are designed to fit the landscape with no new road building and meet the project objectives listed previously.

No changes have been made to the preferred alternative, therefore no changes in environmental effects are anticipated.

DECISION CRITERIA

I am the Responsible Official for the decisions outlined in this Decision Notice. The environmental assessment and public involvement formed the basis for my reasoned decision on the management of forest resources described in the Pipeline EA.

The decision(s) to be made are:

- Whether to select the proposed action or another alternative;
- The methods that would be used to implement the selected alternative;
- When the activities would take place;
- Whether to conduct project-related activities;
- Use of monitoring or mitigation activities;

RATIONALE FOR DECISION

I reached my decision following review of the EA, ICBEMP, NZGA, and comments from the public and other agencies, appendices, project file, and supporting information including the Forest Plan. My criteria in evaluating the proposed action and alternatives were:

- The extent to which the various alternatives met the project's Purpose and Need,
- How well the alternatives responded to public concerns,
- Personal knowledge of the conditions and trends in the area.

The existing conditions in the project area have shown me that the ecosystem is trending outside the Historical Range of Variability (HRV) and may not be able to sustain its desirable and naturally diverse characteristics if current trends continue. See pages 1-4, 1-11, 3-15, and Chapter 4 in the EA.

Earlier in the century, selective logging of ponderosa pine, larch, and white pine altered the species composition in some parts of the area. Fire suppression practices since the early 1900s have also contributed to dense, crowded stands of trees. These overcrowded tree stands are competing for sunlight, water, and nutrients. Such conditions lead to stress in the trees, making them susceptible to insects and disease, in particular: needle cast, blister rust, root disease, bark beetles and mistletoe. Many of the ponderosa pine, lodgepole pine, white pine, and Douglas-fir in the project area are dying from these factors. The overcrowded, diseased stands of trees are now at an increased risk of wildfires, which could burn so intensely that virtually all of the trees in the burned areas would be killed or damaged. Such fires sometimes consume larger areas because the fire climbs up the brush and closely-packed tree branches into the tree tops where it burns more vigorously and is harder to fight. The effects of these stand-replacement fires would not only lower the ecosystem's ability to recover, it would pose a wildfire risk to adjacent private lands that I am unwilling to accept.

National Forest lands are to be managed for multiple-use; therefore, I also considered how the area could contribute to wildlife habitat diversity and recreation. These low-elevation forested lands are especially good for white-tailed deer winter range. As another use of National Forest lands, I looked at opportunities to contribute timber to help support the local economy and meet the national demand for wood products.

Alternatives Considered:

The other alternatives I considered in detail were:

- Alternative 1, the "No Action" alternative, which proposed no timber harvest, ecosystem burning, or sediment reduction improvements for Placer Creek road.
- Alternative 3 (modified proposed action), proposed the exclusive use of seed tree and shelterwood cutting on 555 acres. See the Alternative Comparison table on page 14.

Alternative 2 addresses the Decision Criteria better than either Alternative 1 or 3 because:

It best meets the desired future conditions (DFC) or goals outlined in the Pipeline EA (page 1-2) and the Forest Plan. The stand restoration treatments will move the stands towards historic conditions while allowing for the maintenance and improvement of big game winter range, water quality, the aquatic ecosystems, and other resource values.

It best meets the site-specific purpose and need or objectives, as well as matching the scientific findings of the ICBEMP and NZGA for entering the assessment area. It does this through:

- Reducing stocking levels, which favor ponderosa pine and larch.
- Including burning in the post-sale activities.
- Maintaining or improving big game habitat.
- Maintaining or improving stream channel conditions
- Having a low risk of negatively affecting water quality.
- Contributing to the short term supply of forest products.

Alternative 2 will meet the Purpose and Need as stated in the Pipeline EA (pages 1-3, 4) by:

- Reducing the number of trees per acre, and favoring the development of large diameter ponderosa pine and larch on dry forest types.
- Re-establishing white pine as a significant component of its historic range.
- Reducing the overmature lodgepole pine component in stands where this species is currently susceptible to mountain pine beetle infestations.
- Improving the diversity of forest structures in the area, including larger patch sizes with less fragmentation. This will provide for wildlife, fish, and plant habitat diversity and security. The project area contains stands that are relatively similar in size and age, and therefore, not providing a wide range of wildlife habitats.
- Improving cover and forage conditions on big game winter range.
- Reducing the sediment risk associated with stream crossing failures.
- Reducing the production and delivery of sediment to Placer Creek, from the road surface and ditches.

Alternative 1 (No Action): Would provide adequate big game cover, especially in the short term; however, no projects would be funded at this time for precommercial thinning, ecosystem burning, aspen slashing, or noxious weed control projects. No actions would be taken to maintain or improve big game winter range, or move the stands toward a more historic condition of open grown, large diameter, ponderosa pine, larch, and Douglas-fir stands which provide needed wildlife forage. Instead, current trends would continue the conversion from more open grown pine and larch stands to overstocked stands of fir trees.

Insects and diseases would continue:

- 1). To degrade both the mature and developing timber stands.
- 2). The threat of wildfire to National Forest and adjacent private lands would increase because of fuel build up.

Alternative 1 would *not* meet the Purpose and Need, or my decision criteria.

Alternative 3: Though it would trend the most acres toward a more historic condition, it would *remove* the thermal and hiding cover in all ten Units available for big game animals for about 20 years until the stands regenerated (see table on page 12).

Therefore, it meets the Purpose and Need to a *lesser* degree with the big game issue than Alternative 2 and does not meet my decision criteria as well as Alternative 2 did.

FOREST PLAN CONSISTENCY

All issues, alternatives, and KV projects developed in the Pipeline EA are consistent with direction in the Forest Plan for the Idaho Panhandle National Forests, August 1987.

The Pipeline project area lies within Management Area (MA) - 4, designated by the Forest Plan as "Lands designated for timber production within big game winter range". For a brief description of MA-4 objectives, see EA, page 1-7. In the Forest Plan, refer to Chapter 3, pgs 17-22 for details on the goals, objectives, and management styles that should be used to manage lands within the MA-4 designation. See page 1-1 of the Pipeline EA for a list of other resource documents that support this EA.

Alternative 1 (No Action):

Under this alternative, the following points contradict management direction given in the Forest Plan:

- The opportunity to improve the quantity and quality of forage on big game winter range would be forgone.
- The current forest health issue concerning the increased tree mortality from insect and diseases would not be addressed or solved in any way.
- There is an increasing risk of severe stand replacement fires in urban interface scenarios.
- There is an increasing risk of severe fire related damages to wildlife habitat, watershed stability, and water quality.

Alternative 2 and 3 (Action Alternatives):

These alternatives comply with the Forest Plan guidelines by:

- Improving the quantity and quality of forage on big game winter range.
- Addressing the current forest health issue concerning the increased tree mortality from insect and diseases.
- Lowering the risk of severe stand replacement fires in urban interface scenarios.
- Lowering the risk of severe fire related damages to wildlife habitat, watershed stability, water quality and down stream fisheries.
- Complying with INFS.
- Complying with the Clean Water and Clean Air Acts.

Consistency with other Laws, Regulation, or Policy can be found in the attached FONSI.

Finding of No Significant Impacts

I have determined that these actions are not major Federal actions individually or cumulatively, and will not significantly affect the quality of the human environment.

Therefore, an environmental impact statement is not needed.

This finding is based upon the following factors:

Context of the Decision

The setting of this project is in a localized area with implications for only the immediate area. Active operations are expected to last three to five years. The people most affected will be the local residents, and this effect will in the most part, be attributed to logging traffic on the county road portion of the haul route.

The cumulative effects area (CEA) was based on the resource discussions in the EA. For example, vegetative effects are limited to the project area while the watershed effects area extends to the point where potential effects are no longer measurable. Chapter 3 describes the current condition of the resources that will be affected by the project. Chapter 4 displays the potential environmental consequences of implementing alternatives, including direct, indirect, and cumulative effects where present.

The attached Supplemental Information Report (SIR, 18.1 – New Information) clarifies the existing condition and discloses the potential direct, indirect effects, and any reasonably foreseeable actions related to the soil resource within the CEA of the Pipeline EA.

Intensity of Impacts:

- 1) Both beneficial and adverse effects have been taken into consideration when making this determination of no significance. The action does not rely on beneficial effects to balance potentially adverse environmental effects (EA, Chapter 4).
- 2) Public health and safety are minimally affected by the proposed actions (EA, A-9 through A-15).
- 3) There are no unique characteristics of the geographic area such as proximity to historic or cultural resources, parklands, prime farmlands, or ecologically critical areas; any wetlands or floodplains near the planned actions are not significantly affected (EA, 2-6 through 2-10 and Appendix A).
- 4) The effects upon the quality of the human environment are not likely to be controversial (EA, 2-6 through 2-10, and Appendix A).

- 5) The physical and biological effects are limited to this immediate geographic area or adjacent areas; there are no known effects upon the human environment that are highly uncertain or involve unique or unknown risks (EA, 2-6 through 2-10, and Appendix A).
- 6) These actions do not set a precedent for other projects that may be implemented to satisfy the goals and objectives stated in the IPNF's Forest Plan, as amended (EA, 1-1).
- 7) There are no significant irreversible resource commitments or irretrievable loss of timber production, wildlife habitats, soil production, or water quality; there are no known significant cumulative effects between this and other projects implemented or planned on areas separated from the affected area of this project beyond those disclosed in the Final EIS for the IPNF's Forest Plan, as amended (2-6 through 2-10 and Appendix A).
- 8) There will be no adverse effects to sites listed on, or eligible for, the National Register of Historic Places (EA pp 2-10, and A-9)
- 9) Based upon the analysis documented in the Biological Evaluations, no known threatened or endangered species or their habitats will be adversely affected by this decision (EA, B-40, and B -99). This also applies to the white-headed woodpecker which has not been documented on the BFRD. See range maps in the wildlife section of the project file.
- 10) The actions do not threaten a violation of Federal, State, or local law or requirements proposed for the protection of the environment; and meets disclosure requirements of the National Environmental Policy Act (CEQ 1508.27). See EA, page 1-1.

Findings Required by Other Laws and Regulations

National Environmental Policy Act (NEPA)

The purposes of NEPA are to make sure that environmental information is available to public officials, and citizens, before decisions are made and action taken, to result in better decisions that are based on understanding of environmental consequences, and to take actions that protect, restore, or enhance the environment. I believe Alternative 2 meets the purposes of the Act because of the reasons already stated and as further stated below.

National Historic Preservation Act

This project has been surveyed on the ground by a qualified archaeologist and no Historic sites were located (See project file). No heritage resources are expected to be impacted by this decision (EA, A-9).

Endangered Species Act

The Bonners Ferry District Wildlife Biologist evaluated the Alternatives in regards to threatened and endangered species (gray wolf) and summarized findings in the Biological Assessment (EA, B-40).

Clean Water Act

This decision will implement the Soil and Water Conservation Practices (Best Management Practices) to meet or exceed the intent of the water quality protection elements of the Idaho Forest Practices Act (Watershed Report). This will fulfill the directive of Section 313 of the Federal Water Pollution Control Act Amendments of 1987 (of the 1972 Clean Water Act). This decision is based on the evaluation of existing or potential watershed conditions that would influence water yield and water quality (sediment). Alternative 2 presents the lowest risk of increasing water yields, changing stream stability, and contributing sediment to the watersheds in the project area (Watershed Report).

National Forest Management Act (NFMA)

The National Forest Management Act and accompanying regulations require that the following specific findings be documented at the project level.

Forest Plan Consistency

Management activities are to be consistent with the Forest Plan [16 U.S.C. 1604 (i)]. The Forest Plan guides management activities [36 CFR 219.1(b)]. Page 1-1 of the EA lists the pertinent Forest Plan management area direction in the project area. Consistency with the Forest Plan is discussed in Chapter 4, page 27 of the EA.

Resource Protection - The following statements address resource protection requirements of NFMA:

- 1) Alternative 2 conserves soil and water resources and does not allow significant or permanent impairment of the productivity of the land (See EA Appendix B and attached SIR 18.1, Soils Report).
- 2) Within the scope of the project and consistent with the other resource values involved, activities will minimize risks from serious or long-lasting hazards (EA Appendices A and B).
- 3) Alternative 2 will minimize hazards due to insects and disease by improving forest composition, structure, and diversity of the landscape by providing for tree species and stocking levels similar to historic levels that better resist insects, diseases, wildfire, and that wildlife are adapted to (EA pp. 1-3).
- 4) Alternative 2 will protect bodies of water (EA pp. B-83).
- 5) Alternative 2 will provide for and maintain a diversity of plant and animal communities by moving the project area toward the desired future conditions (EA pp. 1-2).
- 6) Alternative 2 will maintain sufficient habitat for viable populations of existing native vertebrate species (EA, Biological Assessments and Evaluations, Appendix B).
- 7) The Environmental Assessment assesses potential physical, biological, aesthetic, cultural, engineering, and economic impacts of Alternative 2 and its consistency with multiple uses planned for the area (EA, pp. 4-13).
- 8) Alternative 2 prevents the destruction or adverse modification of critical habitat for threatened and endangered species (EA Appendix B, Biological Evaluation, project file).
- 9) There are no right-of-way corridors capable and likely to be needed to accommodate the project (EA, Analysis Highlights).
- 10) Implementation of this project does not require any new system roads (EA, Analysis Highlights).
- 11) Applicable Federal, State, and local air quality standards will be met (EA, pp. A-11 through A-14).

Vegetation Manipulation

All proposals that involve vegetation manipulation of tree cover for any purpose must comply with the following seven requirements found in 36 CFR 219.27(b).

Management practices shall:

- 1) Be best suited to the goals stated in the Forest Plan. Goals for MA-4 are summarized in Chapter 1 of the EA. Consistency with the Forest Plan is discussed in Chapter 1 of the EA.
- 2) Assure that technology and knowledge exists to adequately restock lands within five years after final harvest. Technology does exist to comply with this requirement. Units 1,3,4,6,8, and 9 are where restocking will occur. Site-specific management prescriptions will be developed for these areas and approved by a certified silviculturist to ensure appropriate reforestation will occur.
- 3) Not to be chosen primarily because they give the greatest dollar return or the greatest output of timber (although these factors shall be considered). The proposed management practices are governed largely by resource management and protection needs. Refer to the Purpose and Need identified in Chapter 1 of the EA. I believe Alternative 2 is the best resource decision that meets the identified Purpose and Need while protecting resources.
- 4) Be chosen after considering potential effects on residual trees and adjacent stands. These considerations are contained in the Forest Health section in Chapter 4 of the EA (page 4-1 through 4-16).
- 5) Be selected to avoid permanent impairment of site productivity and to ensure conservation of soil and water resources. These subjects are addressed in the Watershed Report (EA, Appendix B and attached soil report).
- 6) Be selected to provide the desired effects on water quality and quantity, wildlife and fish habitat, regeneration of desired tree species, forage production, recreation users, aesthetic values, and other resource yields. Forest Plan standards and other measures identified for Alternative 2 provide the desired effects.
- 7) Be practical in terms of transportation and harvesting requirements and total costs of preparation, logging, and administration. I believe that Alternative 2 is feasible and practical in the terms listed above.

Suitability for Timber Production

NFMA requires that no timber harvest, other than salvage sales or sales to protect other multi-use values, shall occur on lands not suited for timber production [16 U.S.C. 1604 (k)]. Page 1-10 of the EA lists the Forest Plan management area designation within the project area. Timber harvest will not occur on lands unsuitable for timber production.

Even-aged Management

Returning stands toward their historical condition requires regeneration harvesting across much of the project area and will result in openings greater than 40 acres. Requests for exceeding 40-acre limit have been approved by the Regional Office and documented in the project file.

Riparian Areas

All riparian areas will be protected with buffers where no activities will occur as defined by the Inland Native Fish Strategy (EA, B-83). No management practices that cause detrimental changes in water temperature or chemical composition, block stream courses, or deposit sediment are permitted within riparian areas if they seriously and adversely affect water conditions or fish habitat. Alternative 2 will have no measurable effect on watershed conditions or fish habitat in the Moyie River watershed (EA, Appendix B).

Diversity

Management practices shall preserve and enhance the diversity of plant and animal communities through habitat management so they are at least as great as what can be expected in a natural forest and what are present in the planning area. The discussion under the Forest Health and Big Game Winter Range sections in Chapter 4, show that the diversity in the project will likely be increased by manipulating the stand structures and diversifying the tree species through the project activities.

Environmental Justice

I have reviewed this project for compliance with the Environmental Justice Act. Based on the analysis presented in the environmental assessment and public comments, I find my decision will not adversely affect human health or minority and low-income populations. There have been many opportunities for participation in the analysis process and the implementation of this project will not subject anyone to discrimination because of their race, color, or national origin (EA, A-15).

Appeal Rights and Procedures

This decision is subject to appeal pursuant to 36 CFR 215.7. Within 45 days after the date of the notice of this decision is published in the Spokesman Review, written Notice of Appeal must be submitted to:

USDA, Forest Service, Northern Region
ATTN: Appeals Deciding Officer (RFO)
P.O. Box 7669
Missoula, Montana 59807

Appeals must meet content requirements of 36 CFR 215.14. Detailed records of the environmental analysis are available for public review at the Bonners Ferry District Office, Route 4, Box 4860, Bonners Ferry, Idaho. 83805.

If no appeal is received, implementation of this decision may occur on, but not before, five business days from the close of the appeal filing period. If an appeal is received, implementation may not occur for 15 days following the date of appeal disposition.

NONDISCRIMINATION POLICY

The policy of the United States Department of Agriculture Forest Service prohibits discrimination on the basis of race, color, national origin, age, religion, sex, disability, familial status, or political affiliation. Persons believing they have been discriminated against in any Forest Service related activity should write to:

Chief, Forest Service, USDA,
P.O. Box 96090, Washington, DC
20090-6090.

REVIEWED AND
APPROVED BY:

STEVEN J. KOZEL	District Ranger	
	Title	Date

FOR FURTHER INFORMATION, CONTACT: Doug Nishek, Project Leader
Bonners Ferry Ranger Station
Rt. 4, Box 4860
Bonners Ferry, Idaho 83805
(208) 267-5561



Date: April 01, 2001

TO: The Ecology Center, Inc.
801 Sherwood Street, Suite B
Missoula, MT 59802

Dear Mr. Juel,

Thank you for your comments on the Pipeline EA, they are very important to the NEPA process and the decision making framework. This letter contains your comments and our responses to them.

GENERAL COMMENTS

Comment: In reading the Pipeline Environmental Assessment, it is clear that the decision to log the native forest in this area has already been made. It is very clear that the "analysis" has been written merely to justify the imminent decision rather than to disclose environmental effects. In fact, I have never read a document so full of propaganda and so thin on genuine environmental analysis. The Pipeline Environmental Assessment is better titled the Pipeline Propaganda Package (PP) because it distorts and twists the truth so much in an attempt to mislead the public.

Response: The Pipeline EA is a concise, site specific public document that fulfills the twin aims of NEPA by:

- 1). Considering the environmental impacts of the proposed action.
- 2). Informing the public of the environmental concerns that have been considered in the decision process as defined by NEPA law.

Comment: For example, the PP makes extensive use of photographs to propagandize on the dire consequences of not logging the area. The PP's two biggest photographs are of fires that burned in western Montana. One is of an "urban interface fire in the outskirts of Hamilton" (*are you scared yet, residents along the Moyie River?*) and the other is of a "Riparian area and bridge destroyed by the Mussigbrod fire" (*this could be you, dear homeowner, if we don't log the forest!*)

Response: Pictures are one other way we can increase understanding of our proposals. The pictures you mention on pages 3-4 and 3-5 are used to depict examples of "urban interface fire" and "stand replacement fires". Other pictures are used to illustrate existing conditions (page 3-3), overcrowded stands and desired future conditions (1-4), or forests at risk of insect / disease or stand replacement fires (4-5).

Comment: The PP includes other instances of inappropriate use of photographs. No less than three times it presents a pair of photos, one of an unlogged stand said to represent the “severely overcrowded conditions... well outside... HRV” in the project area, and the other of a logged area that is claimed to represent “desired conditions.” But PP fails to disclose that conditions that are similar to those shown in the “overcrowded” photo occurred naturally, and in fact quite extensively in the area. What the PP also fails to state is that there are limited observations of historic forest conditions inside the project area—certainly too few to make a scientifically sound assessment of what is within and what is outside of the so-called “historic range of variability” (HRV).

Response: The pictures of overcrowded stand conditions do indeed occur “naturally” and “are in fact quite extensive in the area”. That is one of the reasons why vegetation treatments are proposed in the EA. Refer to Chapter 3, (pages 3-6 through 3-14) in the EA to find out why overcrowded stand conditions occur, and why the stands in the project area are “outside the HRV”. References regarding the role of fire in our region, its effect in the ecosystem and the resulting stand conditions can be found in:

- *Thinning, Fire and Forest Restoration* by Rick Brown – Defenders of Wildlife, December, 2000. (See page 13, bottom paragraph)

“Low elevation, dry forests appear to offer the clearest opportunities for thinning-in conjunction with prescribed fire-to contribute to restoration of wildlife habitat while making forests more resistant to uncharacteristically severe fire. For reducing fire risk, the priorities are to reduce surface and ladder fuels and raise the bottom of the live canopy (Agee et al. 2000, vanWagtendonk 1996)”.

“Thinning is most apt to be appropriate where understory trees are sufficiently large or dense that attempts to kill them with fire would run a high risk of also killing overstory trees (Christiansen 1988, Stephenson 1999)”.

- *Forest Health and Ecological Integrity in the Northern Rockies* FPM report 92-7 Second Edition August 1992.
- Draft NZGA
- *Columbia River Basin [CRB] findings* (Scientific Assessment – PNW-GTR-382, Sept 1996)
- *Morgan et al*, 1994 (Item 12) in your FOIA request for this project.

Comment: The flowchart on 4-9 is another example of misleading propaganda. Apparently, with the logging alternatives, you get “increase in tree vigor” and “decreased tree mortality”, “decreased ladder fuels”, “decreased risk of expensive urban interface fires” blah blah but nowhere are these claims actually quantified in any meaningful way.

Response: The title for the flowchart on page 4-9 is “General Flowchart”. The purpose of the flowchart is to demonstrate *broad trends* in the ecosystem given an action alternative is implemented. Quantification of these interactions would be very difficult to model with any accuracy. Further reading that may help you can be found in:

- *The effects of Management on Plant and Community Ecology, and on Stand and Landscape Vegetation Dynamics by Johnson et al. PNW-GTR-322, February 1994.*
- *CRB findings (Scientific Assessment PNW-GTR-382, Sept 1996).*

Comment: And how about Tables 2-4, where the no-action is characterize as “declining forest health” and the more logging by an alternative, the more improved the “forest health”?

Response: In Table 2-4, page (2-16), the Issues are compared to the Alternatives as required by NEPA. Forest health is an issue in our analysis, and that the fact that it will continue to decline under Alternative 1 (No Action) must be demonstrated to the public and compared to the action alternatives [CEQ 1502.14(d)].

Comment: We incorporate the Ecology Center’s January 25, 2000 letter to Forest Supervisor David Wright (a copy of which was provided to the Bonners Ferry District Ranger) as comments on the Pipeline PP. Please place a copy of that letter in the Project File as responsive to your request for comments on the Pipeline PP. The contents of the letter are based upon many years of experience in the public involvement process on the Bonners Ferry Ranger District, the IPNF and the national forests of the region as a whole.

Response: The forest supervisor’s response was as follows:

Thank you for your January 25, 2000 letter. We understand the Lands Council’s position, which is calling for a complete halt to commercial logging of the National Forests. The perceptions espoused in your letter are consistent with this position. We recognize the importance of many of the issues you have raised and believe we address them at the appropriate scale and level of detail commensurate with the decision being made. Many of the concerns you raised are appropriately addressed at the Forest Plan scale or at a more broad scale. We need to get comments we can use a project specific basis.

Once again, please continue to respond as specifically as possible to our project proposals, so that we can be responsive to your concerns about specific management activities as they relate to your broad scale concerns. Thank you for your interest in forest management. As always we welcome you to visit any of our project proposals so you can see for yourself the careful consideration we give these actions.

Comment: The Pipeline PP is poorly edited and extremely confusing in its layout. There are misplaced photo captions, there are tables split inappropriately and unnecessarily onto separate pages. The PP presents information in several places that is contradicted in later passages. The figures are referred to by number in some places, yet none of the figures are numbered. The maps are terrible, omitting many of the important features discussed in the PP. Even if you are lucky enough to have the computer equipment to view the maps and figures on a color monitor, you just end up with blurry bigger images. In fact, without computer capabilities, some of the features keyed in maps are not apparent at all (can anybody find the pre-commercial thin and “aspen rejuvenation” on page 2-22, for example?). Major portions of the PP are repeated verbatim in more than one place.

Response: The formatting errors occurred at the final stages of printing the hardcopy. If you look on the CD version sent to you or on the web at – (www.fs.fed.us/ipnf/eco/manage/nepa/index.html), the formatting and pictures are better than in the hardcopy.

Comment: The choice of delineation of the Pipeline Analysis Area boundaries is not justified or explained. As seen on page 3-20, it intentionally leaves out extensively clearcut areas immediately adjacent to the analysis area. Of course, since those areas are undoubtedly “outside ORV” because of logging, the FS apparently doesn’t want to include their vegetative conditions in HRV discussions, because one then cannot make statements [p. 4-6, “...the Pipeline project area is lacking in forest regeneration (less than 10% of the acreage in small tree classes)...”] that are technically true but distort the truth about the general landscape, which has been extensively clearcut.

Response: The source of confusion seems to be with The Satellite Image of the Pipeline “Analysis Area” i.e. page 4-24. Technically, it should read “Project Area” because that is where the activities are proposed. The cumulative effects area (CEA) boundary follows the Compartment 739 boundary as illustrated on page, 4-26.

On page 4-6 ...”the Pipeline project area is lacking in forest regeneration (seedling and sapling) is less than 10% and for the CEA is 13%, a difference of a whole 3%.

Comment: Many displays are gibberish, such as on page D-4, measures and units are undefined. The PP doesn’t even have a map delineating the Placer Creek watershed.

Response: Rationale for the table is explained on D-3 and on the top of the columns in the table on D-4, you will notice unit abbreviations such as (ha) for hectare(s) and (m) depicting meter(s). A Placer Creek watershed map is located in the project file and available upon request.

Comment: The PP states that HRV is not a static condition, but a trend, yet the project is all about pushing the forest to some static condition. Unfortunately, the PP fails to analyze the ecosystem changes and other management actions that will result from this snapshot-in-time, to-be-achieved static condition.

Response: The definition of HRV and the context of its application is outlined in the EA on page 1-11. Referring to page 4-1, this chapter describes the probable environmental consequences of implementing the alternatives that are described in Chapter 2. It forms the scientific and analytical basis for the comparison of alternatives. Effects or impacts (direct, indirect and cumulative) to the resources are directly linked to the alternative driving issues listed in Chapter 2. Environmental consequences that relate to issues in Appendix A are not discussed in the same amount of detail because of the scope and commensurate level of analysis needed [CEQ 1502.9(a)].

Comment: The PP fails to disclose the nature of the logging from the three timber sales mentioned on 1-2, and how it relates to the “forest health” and other HRV criteria in the project area.

Response: The existing units have successfully regenerated with seral species such as ponderosa pine, larch, and lodgepole. Therefore, they have been trended toward the HRV and make up the 10% of seedling and sapling acres discussed three comments before this.

Comment: The PP fails to disclose the degree to which the Bonners Ferry RD has, in the past, planted the “invasive” Douglas-fir and other shade tolerant species in the project area and the surrounding area.

Response: The following data was compiled from timber stand data base queries.

District-wide, between 1980 and 1989, 4,256 acres were planted with white pine (425 acres/year average) and 6,315 acres were planted with Douglas-fir (630 acres/year average).

District-wide, between 1990 and 1998, 6,400 acres were planted with Douglas –fir (420 acres/year average).

In recent years, studies such as the Interior Columbia Basin Ecosystem Management Project and the Geographic Assessments being conducted on the Idaho Panhandle National Forests have helped to clarify the changes in vegetation composition and structures across the larger landscapes. In turn, this has led to a change in philosophy about the species to be used when regenerating forested areas. White pine strains which are more resistant to blister rust have been developed and are used for replanting since the mid-1980's. Planting considerations now include the historic species compositions for each site-specific location. In general, regeneration harvesting has been reduced on the Bonners Ferry Ranger District over the last decade.

Comment: The PP fails to present any real need for logging to regenerate aspen.

Response: Come and visit the site, you will be able to observe the aspen encroachment from conifer species on first hand basis and hopefully reason that in order to rejuvenate aspen clones, they must be slashed and the conifer competition in and around the clones removed so the clones can resprout and expand in the local area. Further site-specific reference has been written by Terrill (Silviculturist) and is located in the project file.

Comment: “The project file is a part of this environmental assessment” (p.1-11). That means you haven’t sent to the public all of the “environmental assessment” as the regulations at 36 CFR 215 require—so how can we comment on it?

Response: Appeal regulation 36 CFR 215.5(c)(3) “instructions on how to obtain additional information on the proposed action.

Page 1-12 in the EA says... The Appendices contain analytical reports and summaries or supplemental information that clarify or support the narrative within the EA.

Other analysis documents, reports, internal memos, and maps have been referenced or developed during the course of this project. Items not included in this document because of their technical nature or excessive length, are included in the Pipeline Environmental Assessment project file, located at the Bonners Ferry Ranger Station. These records are open and available at the public’s request.

Comment: The Northern Region and/or IPNF Supervisor’s office sets annual timber targets, based upon volume. You should be up-front about it and disclose the amount of volume it this project would cut toward meeting the District’s timber target.

Response: Timber volume would be a by product of the ecosystem restoration activities. The timber volume is not a driving issue with measurable indicators in the Pipeline EA, therefore no values are tracked in the NEPA process.

Comment: The PP says the logging will favor the development of bigger trees, yet nowhere in the PP is there given a specific limit to the size or age of trees that would be logged. This is because the Bonners Ferry Ranger District (BFRD) has an agenda to log big, old trees as much as possible under the guise of “thinning.”

Response: The following tables give a description of the size classes before and after the vegetation management treatments. Notice how the average stand DBH actually increases after thinning out the smaller trees.

Table 1 – ALTERNATIVE 2: Vegetation Conditions Before and After Timber Harvest								
Unit-Rx	Before Harvest				After Harvest			
	PCC	DBH	Major Species	Size Class	PCC	DBH	Major Species	Size Class
1-SW	60-80	12	DF/PP	SAWT	20-40	18	PP	SAWT
2-CT/SS	60-70	9	DF/L/PP	SAWT	50-60	12	L/PP	SAWT
3-ST	50-60	8	DF/LP/L	IMSA	10-20	13	L	SAWT
4-SW	60-70	10	DF/LP/PP	SAWT	30-50	14	PP	SAWT
5-CT/SS	50-100	8	LP/DF/L	SAWT	40-90	10	L	SAWT
6-SW	50-60	14	DF/PP/L	SAWT	30-50	16	L/PP/DF	SAWT
7-CT	70-80	10	PP	SAWT	60-70	14	PP	SAWT
8-SW	70-80	9	DF/PP/L	SAWT	30-50	14	PP/L	SAWT
9-ST	50-60	9	LP/L	SAWT	10-20	12	L	SAWT
10-CT/SS	70-100	9	LP/L/DF/	SAWT	50-90	13	L/DF	SAWT

Table 2 – ALTERNATIVE 3: Vegetation Conditions Before and After Timber Harvest								
Unit-Rx	Before Harvest				After Harvest			
	PCC	DBH	Major Species	Size Class	PCC	DBH	Major Species	Size Class
1-SW	60-80	12	DF/PP	SAWT	20-40	18	PP	SAWT
2-SW	60-70	9	DF/L/PP	SAWT	30-50	14	L/PP	SAWT
3-ST	50-60	8	DF/LP/L	IMSA	10-20	13	L	SAWT
4-SW	60-70	10	DF/LP/PP	SAWT	30-50	14	PP	SAWT
5-SW	50-100	8	LP/DF/L	SAWT	30-50	15	L	SAWT
6-SW	50-60	14	DF/PP/L	SAWT	30-50	16	L/PP/DF	SAWT
7-SW	70-80	10	PP	SAWT	30-50	14	PP	SAWT
8-SW	70-80	9	DF/PP/L	SAWT	30-50	14	PP/L	SAWT
9-ST	50-60	9	LP/L	SAWT	10-20	12	L	SAWT
10-SW	70-100	9	LP/L/DF	SAWT	30-50	15	L/DF	SAWT

PRESCRIBED FIRE

Comment: The PP makes unsupported claims concerning the use of prescribed fire to meet vegetative “HRV”, which led to the unreasonable dismissal of non-logging restoration alternatives. Such a restoration alternative would incorporate thinning and prescribed burning. The PP lacks full analysis of an alternative that would feature all the watershed restoration actions necessary to significantly improve watershed conditions—one that also has no logging.

The PP fails to provide any genuine basis for concluding that 60 years of fire suppression has really altered the forests in the project area to conditions that are somehow outside the natural range of conditions.

Response: The Pipeline EA references the values of periodic prescribed fire using the “Cohesive Strategy” and the time-lapse, photo point information (pg 4-5).

A separate watershed restoration alternative could be developed, however, outside funding or appropriated money would be needed to finance the operation and is outside the scope of this project. Further references that may help you are:

- *Thinning, Fire and Forest Restoration* by Rick Brown – Defenders of Wildlife, December, 2000. (See page 13, bottom paragraph)

“Low elevation, dry forests appear to offer the clearest opportunities for thinning-in conjunction with prescribed fire-to contribute to restoration of wildlife habitat while making forests more resistant to uncharacteristically severe fire. For reducing fire risk, the priorities are to reduce surface and ladder fuels and raise the bottom of the live canopy (Agee et al. 2000, vanWagtendonk 1996)”.

“Thinning is most apt to be appropriate where understory trees are sufficiently large or dense that attempts to kill them with fire would run a high risk of also killing overstory trees (Christiansen 1988, Stephenson 1999)”.

- *Forest Health and Ecological Integrity in the Northern Rockies* FPM report 92-7 Second Edition August 1992.
- Draft NZGA
- *Columbia River Basin [CRB] findings* (Scientific Assessment – PNW-GTR-382, Sept 1996)
- *Morgan et al*, 1994 (Item 12) in your FOIA request for this project.

Comment: Hessburg and Lehmkuhl (1999) headed a blind review of the Wenatchee National Forests "Dry Forest Strategy" and Sand Timber Sale Project on the Wenatchee Forest Service Research Station. It is clear from their review that generally, fuel levels are not too high to preclude the use of prescribed fire alone. One reviewer describes a personal communication with John Agee, states that his upcoming article in the Journal of Forestry deals primarily fuelbreaks and he does not state that it is necessary to reduce fuels by reducing the density of small trees on most areas.

Another reviewer, a fire ecologist stated:

The National Park Service has been using fire for 30 years in dense forests without prior thinning, (see van Wagtendonk 1985), so it is clearly possible to use prescribed fire for fuel reduction without thinning in the Sand Creek ecosystem.

...The statement that fuel levels are so high that thinning must take place first before prescribed fire is used is generally not true. As noted above, the NPS has used fire successfully in heavily fueled stands for a long time.

Response: The ecosystem in Sand Creek must have different stand structures than those in the Pipeline project area. Given the site-specific stand conditions in the Pipeline project area, thinning out the understory followed up with underburning is the best way to treat the ladder fuel and ground fuel component in Northern Idaho timber stands. Granted, there is a short term risk of a ground fire in the slash for a few years until the site is underburned. The trade off is the long term benefit of reducing the risk of a stand replacement wildfire and the potential damages to the watershed, wildlife habitat structure and private property (Chapter 4-2 through 4-8).

Please note the purpose and need statements for this project. The alternatives developed follow NEPA regulations and as stated on page 2-20 "Both prescribed burning methods, regardless of success rates, would produce smoke well in excess of any of the timber harvest alternatives, risk losing the entire organic duff layer, (which is shallow) in these stands, and would waste wood fiber that could be utilized as products. Without a timber sale it is unlikely that we would receive funding for these activities based on budget projections. For these reasons the alternatives were eliminated from further study".

Further reference can be found in an excerpt from the Defenders of Wildlife:

"Low elevation, dry forests appear to offer the clearest opportunities for thinning-in conjunction with prescribed fire-to contribute to restoration of wildlife habitat while making forests more resistant to uncharacteristically severe fire. For reducing fire risk, the priorities are to reduce surface and ladder fuels and raise the bottom of the live canopy (Agee et al. 2000, vanWagtendonk 1996)".

"Thinning is most apt to be appropriate where understory trees are sufficiently large or dense that attempts to kill them with fire would run a high risk of also killing overstory trees (Christiansen 1988, Stephenson 1999)".

Source: *Thinning, Fire and Forest Restoration* by Rick Brown – Defenders of Wildlife, December, 2000. (See page 13, bottom paragraph)

FIRE

Comment: The PP ignores all the scientific evidence that logging, as proposed, will in fact increase, rather than decrease, fire risk. Research has suggested that fire suppression efforts should be concentrated in the urban-wildlands interface in order to be most effective. The urban-wildlands interface that is most essential to limiting fire risk to residences has been found to extend only approximately 130 feet from residences (Cohen 2000).

Response: The FS and State agencies are mandated to suppress all unplanned fires in urban interface situations, especially those fires that are a mere 130 feet from structures.

Comment: Commercial logging reduces the "overstory" tree canopy which moderates the "microclimate" of the forest floor. This reduction of the tree canopy exposes the forest floor to increased sun and wind, causing increased surface temperatures and decreased relative humidity. This in turn causes surface fuels to be hotter and drier, resulting in faster rates of fire spread, greater flame lengths and fireline intensities, and more erratic shifts in the speed and direction of fires. Reduction in tree canopy can also stimulate more growth of brush, which constitutes the fine fuels that can increase the rate of spread of fires.

Commercial logging removes the least flammable portion of trees—their main stems or "trunks," while leaving behind their most flammable portions—their needles and limbs, directly on the ground. Untreated logging slash can adversely affect fire behavior for up to 30 years following the logging operations.

Small-diameter surface fuels are the primary carriers of fire. Current fire spread models do not even consider fuels greater than three inches in diameter because it is mainly the fine-sized surface fuels that allows fire spread. Commercial logging operations remove large-diameter fuels that are naturally fire resistant, and leave behind an increased amount of fire-prone small-diameter fuels.

The notion that commercial logging can prevent wildfires has its believers and loud proponents, but this belief does not match up with the scientific evidence or history of federal management practices. In fact, it is widely recognized that past commercial logging, road-building, livestock grazing, and aggressive firefighting are the sources for "forest health" problems such as increased insect infestations, disease outbreaks, and severe wildfires.

Commercial logging reduces the "overstory" tree canopy which moderates the "microclimate" of the forest floor. This reduction of the tree canopy exposes the forest floor to increased sun and wind, causing increased surface temperatures and decreased relative humidity. This in turn causes surface fuels to be hotter and drier, resulting in faster rates of fire spread, greater flame lengths and fireline intensities, and more erratic shifts in the speed and direction of fires. Reduction in tree canopy can also stimulate more growth of brush, which constitutes the fine fuels that can increase the rate of spread of fires.

Response: Logging may temporarily cause an increased risk of a "ground fire" which is usually a controllable fire. Proposed logging in the Pipeline project area will generally remove ladder fuels which could create "stand replacement fires" and would be difficult to control. The risk of fire in logging slash typically last for one or two years after the units have been harvested after which, the slash is treated with underburning or piling. Further discussion can be found in Chapter 3-2 and Chapter 4-2 through 4-8.

Comment: The PP fails to disclose the precise delineation of time period for which the alleged fire risk reduction will occur. It won't happen right away, since slash will not be burned promptly. It won't be after several years following slash treatment, since the thinned forest will be drier in the understory, and the thinning will allow shrub regeneration and therefore ground fire risk. And the PP and the Forest Plan fail to disclose the costs of maintaining, into later decades, the "HRV" that is alleged to be lowered fire risk.

Response: We agree that the short-term risk of fire would be increased for a year or so after harvesting until the piling / underburning operation would eliminate the slash. The positive side of leaving slash on the ground in the interim is the leaching of nutrients such as potassium from the foliage back into the soil. Harvesting using the regeneration methods as proposed on page 2-17 would eliminate ladder fuels which are essential in developing uncontrollable crown fires.

From page 4-10 ... In the long-term, promoting the development of more open grown stands of larger diameter trees through the use of silvicultural treatments and prescribed burning would reduce the risk of high severity fires. These types of treatments would meet project goals and trend forest composition and structure toward those that more closely resemble historic patterns. Consequently, when fires do burn through these stands; they should burn with less intensity, be easier to control with a lower risk of urban interface fires and post-fire sediment flushes into Placer Creek and the Moyie River.

See page 4-2,3 "Active fire suppression is an action that would continue disruption of the fire return interval. Without silvicultural treatments this disruption would further trend vegetation patterns away from historical conditions".

Supporting discussion can be found in:

- Sensitivity Analysis of a Method for Assessing Crown fire Hazard in the Northern Rocky Mountains, USA (Scott 1998).
- The Influence of Forest Structure on Fire Behavior (Agee 1996).
- The Effects of Thinning and Similar Stand Treatments on Fire Behavior in Western Forests PNW-GTR-number pending (USDA 1999).
- Effect of Thinning and Prescribed Burning on Wildfire Severity in Ponderosa Pine Forests, INT-95075-RJVA (Pollet et al. 1999).
- USDA Forest service Region One Video: Douglas Hill Incident, Putting Fire Back into the Ecosystem.

On the BFRD, underburning stands with logging slash occur as soon as an operationally feasible burning window opens. As stated with the goals and objectives of this project, the idea is to trend stand into values within the HRV and reintroduce the role of fire that these very stands evolved with.

Intuitively, it will be a lot cheaper to be proactive land managers by underburning stands periodically and safely or face the consequences and resource damages affiliated with fighting wildfires that cost of millions of dollars to suppress.

Page 4-3 ...*"When ecosystems are outside the historical range of variability, changes may occur dramatically and rapidly. An investment of money, energy, or human effort may be required to counter processes that would change the desired state of the ecosystem"* (Morgan et al, 1994).

Comment: How can the sources of these problems also be their solution? This internal contradiction needs more than propaganda, such as contained in the Pipeline PP, to be resolved. It is time for the Forest Service to heed the facts, not fantasies, and develop forest management policies based on science, not politics.

Response: From page 4-2...the belief in a steady-state forest (one that doesn't change over time) has led scientists and others to assume that undisturbed forest structure or development pattern is natural and therefore conducive to sustaining biodiversity and sustainability. The steady-state model or paradigm of forest development has prevailed at different times in the thinking of foresters, conservationists, ecologists, and politicians for some parts of the past century.

The paradigm has led to the management policy of stopping all fires, to the ecological theories of disturbances destroying a steady-state ecosystem, to the policies of reducing clear cuts and trying to stop stream siltation events, and to the political assumption that stopping all human activities in the forests would mitigate loss of endangered species (Johnson et al, 1994). The steady-state paradigm for forest ecosystems has lost credit among plant ecologists (Oliver and Larson 1990, Picket and White 1985, Stevens 1990). Please turn to page 4-5 and examine the 1909, 1948 and 1989 photos. One doesn't even need to read in order to see the effects and costs of the leaving fire out of the ecosystem and in the long run "loving your forest to death".

Comment: Timber plantations comprised of densely-stocked, even-aged stands of young conifers are extremely flammable and vulnerable to catastrophic fire effects. When old clearcuts burn they normally result in 100% mortality of trees, yet have no native seed sources to naturally regenerate stands. Thus, burned plantations require expensive and repeated management inputs to achieve successful reforestation.

Response: There is a slight chance old clearcuts or plantations *could* have 100% mortality, if there was red slash from pre-commercial thinning fueling the fire. Typically on the Bonners Ferry Ranger District, wildfires slow to a stop because of the reduced fuels in these old clearcuts. In the last thirty years, the district have replanted up to 10 acres of burnt over clearcuts.

One of the objectives in the Pipeline EA is to reduce the risk of wildfire around the existing plantations and keep fire out of them until the trees are large enough to sustain an underburn.

Comment: Watersheds that have experienced extensive logging and road-building also experience greater fire severity than unlogged and unroaded watersheds.

Some statements the government's own scientists say about logging and wildfires include:

Timber harvest, through its effects on forest structure, local microclimate, and fuels accumulation, has increased fire severity more than any other recent human activity.
--Sierra Nevada Ecosystem Project, 1996. Final Report to Congress.

Logged areas generally showed a strong association with increased rate of spread and flame length, thereby suggesting that tree harvesting could affect the potential fire behavior within landscapes. In general, rate of spread and flame length were positively correlated with the proportion of area logged in the sample watersheds.
--Historical and Current Forest Landscapes in Eastern Oregon and Washington. Part II: Linking Vegetation Characteristics to Potential Fire Behavior and Related Smoke Production (PNW-GTR-355)

As a by-product of clearcutting, thinning, and other tree-removal activities, activity fuels create both short- and long-term fire hazards to ecosystems. The potential rate of spread and intensity of fires associated with recently cut logging residues is high, especially the first year or two as the material decays. High fire-behavior hazards associated with the residues can extend, however, for many years depending on the tree. Even though these hazards diminish, their influence on fire behavior can linger for up to 30 years in the dry forest ecosystems of eastern Washington and Oregon.
--Historical and Current Forest Landscapes in Eastern Oregon and Washington. Part II: Linking Vegetation Characteristics to Potential Fire Behavior and Related Smoke Production (PNW-GTR-355)

It appears significant that many large fires in the western United States have burned almost exclusively in slash. Some of these fires have stopped when they reached uncut timber; none has come to attention that started in green timber and stopped when it reached a slash area.
--G.R. Fahnestock, 1968. Fire hazard from pre-commercially thinning ponderosa pine. U.S. Forest Service

Fire severity has generally increased and fire frequency has generally decreased over the last 200 years. The primary causative factors behind fire regime changes are effective fire prevention and suppression strategies, selection and regeneration cutting, domestic livestock grazing, and the introduction of exotic plants.
--Integrated Scientific Assessment for Ecosystem Management in the Interior Columbia Basin (PNW-GTR-382)

The high rate of human-caused fires has generally been associated with high recreational use in areas of higher road densities.
--An Assessment of Ecosystem Components in the Interior Columbia Basin and Portions of the Klamath and Great Basins--Volume II (PNW-GTR-405)

Mechanically removing fuels (through commercial timber harvesting and other means) can also have adverse effects on wildlife habitat and water quality in many areas. Officials told GAO that, because of these effects, a large-scale expansion of commercial timber harvesting alone for removing materials would not be feasible. However,

because the Forest Service relies on the timber program for funding many of its other activities, including reducing fuels, it has often used this program to address the wildfire problem. The difficulty with such an approach, however, is that the lands with commercially valuable timber are often not those with the greatest wildfire hazards.

--GAO, Western National Forests: A Cohesive Strategy is Needed to Address Catastrophic Wildfire Threats (GAO/RCED-99-65)

The FS must reconcile the vast discrepancies between its claims of fire risk impacts reduction by logging and the position of so many other government scientists. Please tell us why statements made in the PP stand in such stark contradiction to the government's own scientists on the issue of fire and logging?

Tiedemann et. al. (2000) challenge the FS's claim to understand the concept of "historic range of conditions" and seriously calls into question the whole notion that we can, or even should, try to replicate such conditions where they state: "Nearly 100 years of fire exclusion, possible climate changes, and past management practices may have caused these communities to cross thresholds and to reside now in different steady states."

Response: The Pipeline EA has been designed to meet multiple objectives such as those on page 1-2 ...

- Trend timber stand characteristics toward levels within their Historical Range of Variability (HRV). The definition of HRV is on page 1-10.
- Increase the quality and quantity of big game winter range.
- Reduce the intensity of wildfires to National Forest and adjacent private lands.

Development and design of the Pipeline EA incorporates site specific information, public scoping and the latest scientific data from the Integrated Scientific Assessment for Ecosystem Management in the Interior Columbia Basin (PNW-GTR-382) and A Cohesive Strategy (2000).

The underlying guide driving the Pipeline EA is also a quote from your own Wild Rockies website which blends well with the principles of keeping our forest ecosystems within their Historical Range of Variability (HRV).

A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise. --Aldo Leopold

The Interdisciplinary Team members that developed this project are natural resource professionals and many are wildland firefighters. They have first hand (site-specific) knowledge of the proposed units have many years of experience in the field, implementing projects such as this one. The BFRD takes pride in its work and there is no reason that this project is not feasible.

An example of a completed project similar to the Pipeline EA is located near Naples, ID. Its name is the Stampede Timber Sale. Stop by and visit the area, see the effects of fire for yourself, look at the snags and wildlife use, talk to the neighbors in this urban interface situation. It would certainly be more proactive than throwing quotes back and forth.

From page 4-2...

The belief in a steady-state forest (one that doesn't change over time) has led scientists and others to assume that undisturbed forest structure or development pattern is natural and therefore conducive to sustaining biodiversity and sustainability. The steady-state model or paradigm of forest development has prevailed at different times in the thinking of foresters, conservationists, ecologists, and politicians for some parts of the past century.

The paradigm has led to the management policy of stopping all fires, to the ecological theories of disturbances destroying a steady-state ecosystem, to the policies of reducing clear cuts and trying to stop stream siltation events, and to the political assumption that stopping all human activities in the forests would mitigate loss of endangered species (Johnson et al, 1994). The steady-state paradigm for forest ecosystems has lost credit among plant ecologists (Oliver and Larson 1990, Pickett and White 1985, Stevens 1990).

Please turn to page 4-5 and examine the 1909, 1948 and 1989 photos. One does not even need to read in order to see the effects and costs of the leaving fire out of the ecosystem and in the long run, "loving your forest to death".

From page 4-6...

In the moister cedar /hemlock habitat types succession would continue toward the development of closed canopy stands dominated by Douglas-fir and grand fir, which are susceptible to root diseases. White pine and larch would fail to regenerate without forest openings and they would eventually become insignificant components of these stands. In fact, without either natural (fire or pathogen-caused) or human thinning, larch would drop out of most stands sometime in the future and not maintain the ecological role it had prior to Euro-American settlement and fire suppression (Zack 1995). Species adapted to open grown, drier ponderosa pine habitats will decline, and species associated with shade tolerant grand fir habitats will increase over historic levels.

In the long-term, forest conditions would continue to change over time. The cycle of forest growth and regeneration would continue. Only a limited amount of growth could occur in forest stands before they become overstocked and stagnant. At this point stands would become stressed and susceptible to insect and disease attacks, and eventually fire. Acting on their own, insects and diseases would begin to regenerate these forests by killing trees individually, or in pockets, over the course of many years.

Fire, on the other hand, is a much faster acting process that typically works in combination with insects and diseases to regenerate a forest, normally in a matter of days. In general, the Pipeline project area is lacking in forest regeneration (less than 10% of the acreage in small tree classes), but has an abundance of stands growing pole and medium size trees. Due to the overstocked nature of these stands it would be difficult for trees to become very large without some sort of reduction in competition.

With continued fire suppression and no stand treatments, this trend would continue and the discrepancy between size classes would continue to grow. Consequently, not only would the risk of fire continue to grow, but the risk of higher severity fire would continue to grow as well.

We agree that the short-term risk of fire would increase immediately after harvesting because of the increase in ground fuels. However, the fire intensity would be reduced because the ladder fuels will be removed and therefore the risk of stand replacement crown fires will be greatly reduced. Supporting discussion can be found in:

- Sensitivity Analysis of a Method for Assessing Crown fire Hazard in the Northern Rocky Mountains, USA (Scott 1998).
- The Influence of Forest Structure on Fire Behavior (Agee 1996).
- The Effects of Thinning and Similar Stand Treatments on Fire Behavior in Western Forests PNW-GTR-number pending (USDA 1999).
- Effect of Thinning and Prescribed Burning on Wildfire Severity in Ponderosa Pine Forests, INT-95075-RJVA (Pollet et al. 1999).
- USDA Forest service Region One Video: Douglas Hill Incident, Putting Fire Back into the Ecosystem.

OLD GROWTH

Comment: The PP fails to provide, and fails to incorporate, any sort of forestwide analysis that assures that the Forest Service has complied with any of the old growth Forest Plan Standards 7a, 10a 10b, 10c, 10e, and 10f. Therefore, the Forest Service cannot demonstrate that viable populations of old growth management indicator species will remain on the Forest following project implementation. "Pursuant to NFMA, the Forest Service must demonstrate that a site-specific project would be consistent with the land resource management plan of the entire forest." Neighbors of Cuddy Mountain v. U.S. Forest Service, 137 F.3d 1372, 1376 (9th Cir. 1998) at 1377(5).

The PP fails to disclose how the BFRD is complying with Forest Plan old growth Standards. The PP does not explain if the IPNF is in compliance with old growth Standard 10b, which requires the Forest Service to "Maintain at least 10 percent of the forested portion of the IPNF as old growth."

The PP does not explain if the BFRD is in compliance with old growth Standard 10c, which requires the Forest Service to "Select and maintain at least five percent of the forested portion of those old-growth units that have five percent or more existing old growth." In other words, the PP must disclose which Old Growth Management Units (OGMUs) fall within the project area to some degree, and how much old growth there is in the OGMUs.

The PP does not explain if the BFRD is in compliance with old growth Standard 10a, which requires that stands in the OGMUs that are classified as old growth should actually meet the IPNF's definitions, or if the inventory is based upon faulty or inappropriate survey methods.

The PP does not explain if the BFRD is in compliance with old growth Standard 10e, which requires that old growth stands reflect approximately the same habitat type series distribution as found on the IPNF. So, for example, how much lodgepole pine-type old growth is there within the appropriate geographic area?

The PP does not explain if the BFRD is in compliance with old growth Standard 10f, which requires:

One or more old-growth stands per old-growth unit should be 300 acres or larger.

Preference should be given to a contiguous stand; however, the stand may be subdivided into stands of 100 acres or larger if stands are within one mile. The remaining old-growth management stands should be at least 25 acres in size.

Preferred size is 80 plus acres.

Response:

- The Pipeline EA does not analyze old growth stands in the project area because no old growth exists in the project area. Refer to page 2 of the EA under Pipeline Environmental Highlights.
- Maintaining at least 10% of the forested portion of the IPNF as OG is beyond the scope of the project.
- The old growth stands in the Placer Creek drainage are in OGMU # 27 and total about 11,000 acres. Further breakdown of OG can be found in the FOIA letter and TSMRS data sent to you 11/28/00.

SNAGS

Comment: The BFRD seems to fail to understand that dead, diseased, dying, etc. trees have a role in the forest—they are not reasons for logging. Since your proposal distorts the value of these habitat components of wildlife, perhaps it is time you stepped back to see how previous management actions have affected them. Please disclose the amounts of snags, recruitment snags, and down woody debris previous logging operations have left in old cutting units, in a reasonably-defined cumulative effects analysis area, so that the public can tell if you've met Forest Plan requirements in those units. Please compare these amounts to the amounts of snag habitat and down woody debris exist in unmanaged areas for comparison (this means you must perform field surveys).

The PP purports to present an intelligent discussion of forest disturbances, yet analysis of many important disturbances is lacking. These include the effects of insects and their interrelationships with woodpeckers and other natural balancing forces, and tree diseases.

Response:

- The BFRD agrees that dead and dying trees, snags, insects and down woody debris have a role in the forest ecosystem. From the Purpose and Need statement in the Pipeline EA, on page 1-4... *The proposed activities are designed to improve forest health within the project area by maintaining a diverse, productive and sustainable forest. A sustainable healthy forest can be maintained by keeping natural processes intact and interacting in the same way the forest ecosystem evolved.*
- Chapter 3 of the EA "describes the current condition of the resources as related to the major, or primary, issues. These issues represent components of the environment that would affect, or that could be affected by the alternatives if they were implemented". The changes that have occurred throughout the analysis area because of past activities are inherent in these discussions.
- Chapter 4 describes the probable environmental consequences of implementing the alternatives described. This chapter provides the cumulative effects analysis of past, ongoing, and proposed activities.
- See snag discussions in the wildlife report, Appendix B-20, 21, 30, 31, 36-38.

Comment: The PP fails to disclose the degree to which snags will be lost due to logging operations, instead making vague assurances about snag retention. The BFRD fails to disclose the results of monitoring of snag retention in similar logging operations. The analysis must disclose, based upon experience, the percentage of these snags we can expect to find standing in each unit after the various "treatments." Otherwise, promises to leave snags are empty.

Response: Notice the purpose and need statementto favor the development of large diameter ponderosa pine and larch. According to the Forest Plan, these are the very best snags to leave for wildlife. As stated on page 2-6 "All standing non-merchantable dead trees will be retained (except those that are hazardous to logging operations) for snag dependent wildlife and large woody debris recruitment. A snag analysis for the Pipeline project area was

conducted and, as a whole, the area exceeds standards in the *Regional Snag Management Protocol of January, 2000* for snags.” Given this successful track record, BFRD will continue maintenance of these standards by leaving a range of 6 – 12 snags/replacement snags per acre (depending on habitat type) throughout areas proposed for timber harvest.”

Comment: The PP does not explain if the BFRD is in compliance with IPNF Forest Plan Wildlife Standard #7a, which requires the Forest Service to “Maintain at least minimum viable populations of management indicator species distributed throughout the Forest (emphasis added).”

Response:

- The EA addresses your concerns in the Biological Assessment starting on page B-2.
- The Forest Plan, in compliance with NFMA, establishes Forest wide management direction, goals, objectives, standards and guidelines for the management and protection of wildlife habitat and species, including: old-growth habitat, management indicator species, Sensitive species, and Threatened and Endangered species.
- The cumulative effects table is on B-40.

Given that the silvicultural treatments will promote large Ponderosa pine and Larch snags, which are highly sought after by MIS. There is no evidence that the vegetation treatments will not maintain viable populations in the project area, given our level of analysis and apparent risk.

Comment: The PP does not disclose the amount of snag, cavity nesting, and large down wood habitat components in the project area. The proposed logging would exacerbate any deficiencies and lead to longer delays in the development of such habitat components. This would adversely affect populations of lynx, pileated woodpecker, black-backed woodpecker, white-headed woodpecker, pine marten, fisher, wolverine, Townsend’s big-eared bat, northern goshawk, flammulated owls, barred owls, and other species which depend upon these habitat components.

Response: Several of these species do not occur in the area, or are non-native (barred owls). The EA recognizes the value of these snags to all the snag dependant species and is promoting them whenever possible. See Regional Snag Protocol 2000.

The Pipeline project would completely alter the snag regime of the forest in logged and burned areas, without providing an analysis of the temporal situation of snags and down woody debris.

Response: From the Purpose and Need statement... Reduce the number of trees per acre, and favor the development of large diameter ponderosa pine and larch on dry forest types. This means that the silvicultural treatments will promote large Ponderosa pine and Larch snags, which are highly sought after by MIS. There is no evidence that the vegetation treatments will not maintain viable populations in the project area, given our level of analysis and apparent risk.

Comment: The PP does not disclose whether or not the previously logged areas meet standards and guidelines for snag and snag recruitment habitat. They probably do not, since the kind of logging carried out in the past was rather careless of cavity nesting habitat. Therefore, the FS must devise conservation strategies both forestwide and for the project area which will assure that viable populations of species needing snags and large down woody debris are maintained.

The 1998 Forest Plan Monitoring and Evaluation Report calls for updated snag guidelines: "Apply snag and down woody material guidelines from the Upper Columbia River Basin Assessment to improve marten habitat" (p. 39). Although the Report doesn't state what those guidelines should be, we welcome the IPNF's acknowledgment of scientific evidence that refutes its inadequate guidelines. Bull et al., provide the following critique of the Thomas et al. (1979) guidelines, upon which the IPNF relies:

The guide most widely used in the past, Thomas and others (1979), prescribed the number of nest and roost trees to leave for specified woodpecker populations, but the number was based on a hypothetical, untested model and did not include any snags for foraging. Three studies (Baste 1995, Bull and Holthausen 1993, Dixon 1995) conducted in eastern Oregon have shown that retaining foraging structure is essential, in addition to nest and roost trees in managed landscapes. The Thomas model provided only two roost trees per pair per year, yet research has shown that individual pairs of pileated woodpeckers and white-headed woodpeckers use considerably more than two per year (Bull and others, 1992, Dixon 1995). Radio-telemetry studies have shown that home range sizes of pileated woodpeckers (Bull and Holthausen 1993), white-headed woodpeckers (Dixon 1995), and three-toed and black-backed woodpeckers (Goggans and others 1988) are considerably larger than those used in the Thomas model. Raphael and White (1984) found that the relation between numbers of snags and cavity nesters is not linear, which was assumed in the Thomas model. The substitution factor used in the Thomas model is variable and largely a function of snag density. Neitro and others (1985) thought allowing substitution of snags that reduced the number retained was not appropriate. The Thomas model did not take into account the habitat needs of some of the secondary cavity nesters, like bats and brown creepers, that use such snag features as loose bark. In addition, Bull and Holthausen (1993) found lower densities of pileated woodpeckers in nine study areas than predicted by Thomas and others (1979) based on the number of snags present. The above studies present new data suggesting that some of the assumptions and data used in the Thomas model are not valid, and that the prescribed snag densities need to be revised upward. (Bull 1997, p. 28.)

The PP claims that Bull et al., 1997 justifies the use of four snags per acre as maintaining viable populations. However, the PP oversimplifies and distorts what Bull, et al. state:

Ideally, data would be available on the exact number of snags required to support specific populations of primary and secondary cavity nesters. Unfortunately, this kind of information is not available. We do know, however, that the snag numbers presented by Thomas and others (1979) are not adequate to support the populations intended because of a lack of foraging strata and invalid assumptions used in the model. If management agencies have an objective to manage for viable populations of woodpeckers, providing numbers of snags that have been shown to support viable populations in the recent studies would be prudent. (p. 29.)

Response: As stated on page 2-6 "All standing non-merchantable dead trees will be retained except those that are hazardous to logging operations) for snag dependent wildlife and large woody debris recruitment. A snag analysis for the Pipeline project area was conducted and, as a whole, the area exceeds standards in the *Regional Snag Management Protocol of January, 2000* for snags." Given this successful track record, BFRD will continue maintenance

of these standards by leaving a range of 6 – 12 snags/replacement snags per acre (depending on habitat type) throughout areas proposed for timber harvest.” Further reference can be found in Appendix B.

ECONOMICS

Comment: The PP fails to disclose the fact that timber prices are very low, and does not consider in any economic analysis the implications of low lumber prices. For example, the degree of uncertainty of carrying out K-V funded activities.

Response: From page A-10...The proposed sale is on productive forestland and could be offered with minimal investment. The Good Grief Addie Timber Sale was advertised for \$135/MBF and sold for \$161/MBF, the Katamount Timber Sale was advertised for \$105/MBF and sold for \$109/MBF, the Rock Bottom Timber Sale was advertised for \$101/MBF and sold for \$122/MBF. Recently, Bugs in Paradise Timber Sale sold for \$181/MBF. Both action alternatives are expected to follow these trends and would be economically viable. Alternative 3 would be more economical, since it would remove more volume per acre than with Alternative 2. Alternative 1, the No Action Alternative, would produce no timber - related revenue for individuals, the county, or the federal government.

Comment: The PP fails to provide a sound financial analysis that displays, by alternative, the short- and long-term costs of maintaining all the roads and the costs of preparing the NEPA analysis and administering the timber sales.

Response: The purpose and need of this project is to conduct ecosystem management restoration activities. Tracking road costs, timber volumes, and NEPA costs are not part of the NEPA process and outside the scope of this project.

SOILS

Comment: The PP fails to disclose the amounts of existing detrimentally disturbed soils in proposed cutting units, therefore making all claims of mitigation essentially meaningless.

Response: Proposed units 2,5,6,9,10 have existing skid trails and landings established in them. The detrimental soil compaction in these units follows the forest average of approximately 18%.

From page 2-7 ... To reduce soil compaction and displacement and to protect residual crop trees, existing and/or designated skid trails will be required for all ground-based and cable yarding operations (Froehlich, Aulerich, and Curtis, 1981). Specifications found in the Region One Soil Quality Standards (revised Feb 7, 2000) would be followed.

Comment: The PP fails to disclose the nature of the geological processes that formed the landforms and soils, and therefore the factors contributing to soil structure and stability.

The PP fails to show all past and proposed cutting and burning units plus existing and proposed roads on a legible map overlaid with landtypes, so that risks of past developments and of proposed activities can be reasonably understood.

Response: Turn to page B-67, 68 to see maps of sensitive landtypes and mass failure potential. The local soils are derived from glacial till and have an abundance of glacial cobble with ashcap type soils between the rocks.

Comment: The PP says there will be no new roads, yet fails to disclose that excavated skid trails and some of the proposed "reconstruction" is obviously just as impacting as a new road.

Response: From page 2-8... Unit design and location will facilitate logging with a minimum amount of excavated skid trails. Where excavated trails are constructed, they will be kept to a minimum and will be obliterated by the purchaser following completion of logging activities. Organic debris will be placed on top of the obliterated prism to facilitate revegetation.

Implement site-specific soil and water conservation Best Management Practices for units and roads to meet or surpass the level of Idaho State Best Management Practices for soil and watershed protection (all action alternatives). Site-specific practices that meet or exceed Clean Water Act standards will be incorporated into the timber sale contract.

WEEDS

Comment: Commercial logging spreads invasive weeds and stimulates the growth of brush species which are much more flammable than the original forest cover. Once the commodity timber outputs have been removed, federal agencies have no economic incentives to manage the vegetation that colonizes sites disturbed by logging operations, thus fires will continue to burn through logged areas.

Response:

Please refer to page 2-9:

- 1) Identified existing weed infestations within the project area would be treated according to guidelines established in the Bonners Ferry Weed Control Projects EIS and Record of Decision (ROD) (USDA 1995).
- 2) The contract clause for Noxious Weed Control would be used to require cleaning of all off-road equipment *before and after* working in the Sale Area.
- 3) Contract provisions would be used to treat haul routes and landings in the project area for noxious weeds.

All reconstructed roads, and other areas of ground disturbance such as landings and skid trails, would be seeded with a weed free native and desired non-native seed mix and fertilized as necessary as soon after site disturbance as is practical.

Comment: The PP fails to take a hard look at the issue of likely noxious weed spread, and the need to take control actions for existing noxious weed infestations in the project area.

The PP states that noxious weeds will be treated according to guidelines established in the Bonners Ferry Weed Control EIS, yet the BFRD failed to complete adequate NEPA on that EIS. And the PP must also disclose the impacts of the weed control actions specified under the Bonners Ferry Weed Control EIS, since that EIS was not a programmatic document.

Response: From page 2-9... Identified existing weed infestations within the project area would be treated according to guidelines established in the Bonners Ferry Weed Control Projects EIS and Record of Decision (ROD) (USDA 1995).

The contract clause for Noxious Weed Control would be used to require cleaning of all off-road equipment *before and after* working in the Sale Area.

Contract provisions would be used to treat haul routes and landings in the project area for noxious weeds.

All reconstructed roads, and other areas of ground disturbance such as landings and skid trails, would be seeded with a weed free native and desired non-native seed mix and fertilized as necessary as soon after site disturbance as is practical.

Comment: The PP fails to include an alternative that would not violate NFMA's limits on the size of regeneration units.

Response: The Pipeline EA has specific Goals and Objectives listed on page 1-2,3. The 40 acre limitation has not been violated with any of the alternatives. Regeneration units can legally exceed 40 acres in size if the reasons to do so are valid and if the action is approved by the Regional Office.

CUMULATIVE EFFECTS

Comment: The PP fails to adequately disclose the cumulative impacts, on the various resources, of the reasonably foreseeable actions (4-13) to occur in the same time period as the Pipeline project.

Response: From page 4-13... This section includes both federal and non-federal "Reasonably Foreseeable Actions." The federal actions discussed below include federal actions that are listed on the IPNF's Schedule of Proposed Actions (SOPA). These federal actions are currently at various stages in the planning process.

Projects that may overlap or are adjacent to the Pipeline project area are:

- Bonnors Ferry Ranger District Salvage EIS.

- District Overstory Removal EA.

- Logging on adjacent private lands.

- Gravel pit reactivation (County).

- Current Timber Sale Activities

This is the best information available at this time and no changes in the decision status have occurred.

Comment: We don't see a single inch of road proposed for obliteration, even though you admit you can't maintain your excessive road network. Please consider the ongoing cost of maintaining all roads in the Placer Creek watershed as costs of this project, if you insist on not genuinely proposing to deal with the facts of too many roads.

Does you propose to obliterate all non-system roads in the project area? If not, please explain why, since regulations generally require obliteration.

At A-19 the PP states that the worst damage to Placer Creek is due to existing problems the BFRD doesn't even want to face. That's not enlightened management. How do you propose to fix these problems?

Response: No road obliteration needs were identified. Analysis only occurs on roads that will be used by this project. The maintenance for other roads in the Placer Creek watershed are funded from other sources and beyond the scope of this project.

Comment: Given the overwhelming ecological damage associated with roads (including “temporary” roads and excavated skid trails) as compared to any other factor, an alternative should be fully analyzed that precludes all road construction and salvage logging and instead focuses on watershed restoration via road obliteration and sediment source reduction on retained roads.

Response: With the given goals and objectives of this project, salvage logging is not an option. No road obliteration needs were identified.

WILDLIFE

Comment: The PP fails to disclose that the IPNF has not monitored the population trends of its old growth MIS—including pine marten, pileated woodpecker, and the northern goshawk. Forest Plan Monitoring item F-1 requires the annual monitoring of "Population trends of indicator species" and this monitoring information is to be reported every 5 years. Additionally, "Downward population trends" are the "threshold to initiate further action" but if you haven't monitored, you are unable to respond with "further action" as necessary.

The PP admits that several Sensitive fish and wildlife species inhabit the project area, for example the fisher and northern goshawk, and that project impacts include degrading habitat at least for some duration, yet the IPNF lacks Conservation Strategies with which to compare project design, so that viability of populations can be assured over the appropriate landscape level.

Response: The BFRD monitors goshawk territories on an irregular basis as funding allows. These results are in the annual Forest Plan Monitoring Reports. However, goshawks are a widespread species and a monitoring protocol that is on a landscape level is the only way to detect real change. Even so, the surveys that have been done in the last decade on the BFRD have consistently found goshawks, at a level commensurate with effort. The number of territories found, and the anecdotal sightings by district biologists, suggests that goshawks remain widespread and common on the BFRD.

In the early 1990's, a Region 1 Landbird Monitoring Program was established. Landbirds are ideal organisms to monitor because they are easy to survey, they have diverse habitat requirements, and they are sensitive to habitat changes. This monitoring protocol does not monitor all species equally well, and birds with large home ranges such as goshawks and pileated woodpeckers are two that do have large home ranges. Nevertheless, the monitoring effort is designed to detect long term trends, and so the Forest Service will have some indication of the effects of their activities from this effort. Further, the birds that are surveyed well can be a good proxy for those that are not, because of the number of species detected and the diversity of their habitat requirements. Thus, while fishers are also not monitored, the habitat that supports fishers also supports a guild of landbirds that typically are associated with that habitat.

The North Zone Geographic Assessment analyzed habitat for a number of species, including large wide-ranging carnivores. This assessment covered the three northern districts of the IPNF. This mid-scale assessment provided a framework, along with district-wide habitat modeling results, to analyze the habitat available and the proportion affected by the Pipeline EA project.

Old Growth Management Indicator Species (MIS) are described in Appendix B pages 20-21.

The Pipeline EA uses a level of analysis commensurate with the importance of impacts. From Appendix B-24... The level of analysis is dependent on a number of variables including but not limited to: the existing condition, the cause and effect relationship, the magnitude or intensity of effects, the contrast in effects between alternatives, the risks to resources, and the information necessary for an informed decision. The analysis is commensurate with the importance of the impact (CEQ 1502.15), the risk associated with the project, the species involved, and the level

of knowledge already in hand (USDA Forest Service, 1992).

The geographic scope for the wildlife analysis varies by species. This analysis uses the following sources, which provide the primary direction, foundation and methods used to develop the analysis for potential effects on wildlife.

- Integrated Scientific Assessment for Ecosystem Management in the Interior Columbia Basin
- IPNF Forest Plan, including Forest Plan Monitoring

-Available Conservation Assessments and Strategies for wildlife species, or Management Plans. For this project, these include specifically:

- Grizzly Bear Recovery Plan
- Montana Bald Eagle Recovery Plan
- Woodland Caribou Recovery Plan
- Lynx Conservation Assessment and Strategy
- Idaho Bird Conservation Plan
- Townsend's Big-eared Bat Conservation Assessment
- Draft Harlequin Duck Conservation Assessment and Strategy
- Region 1 Snag Management Protocol 2000.

(Some of these do not apply to threatened or endangered species, but provide overall conservation guidelines.)

Additional scientific literature as appropriate, including predictive habitat models.

A list of surveys conducted will be provided to the public upon request.

Comment: The PP fails to disclose the impacts on boreal toad viability following logging and burning of upland habitat.

Response: The Boreal Toad habitat is not measurably affected (Table 1 on B-4).
From B-11...

Rationale for No Further Analysis

Preliminary analysis shows that Inland Native Fish Strategy guidelines concerning riparian habitat conservation areas within 150 ft. of the edge of wetlands would prevent sedimentation of toad breeding habitat. Because toads frequently breed in muddy-bottomed ponds (Nussbaum et al, 1983, p. 129), a small amount of sedimentation is not a great cause for concern for this species. Road density and restrictions would not change as a result of this project, so mortality risk from vehicles would remain the same. Thus, adequate design criteria and mitigation measures are incorporated to protect boreal toads and their habitat.

Comment: The PP discusses habitat for some species outside the project area, generally to justify degradation of habitat within the project area, yet fails to provide any real quantitative analyses. It also fails to justify why it does not discuss habitat outside the project area for other species—species such as lynx, grizzly bear, wolverine, caribou, etc. that are wide-ranging and for whom landscape connectivity and core areas are important issues.

Response: The EA discusses habitat outside of the project area where reduction of habitat quality would occur within the Project Area because it provides context for the amount of habitat available and its relationship to historical conditions. The EA also notes that some species probably have extraordinarily high quality habitat in the project area currently as a result of fire suppression, but at the expense of other species' habitat that would be present under natural fire regimes.

None of these species have been noted in the project area. Please refer to Appendix B where these species and their required habitats are discussed. The bottom line is that these species are transient in nature and the odds of a caribou setting foot in the project area is very low. The proposed vegetation treatments will not create a barrier to these animals in the rare event that they do cross the project area. From Appendix B-27... Surveys have been done for most of the emphasis species on the Bonners Ferry Ranger District, to varying degrees. The project file contains a list of surveys done on the Bonners Ferry Ranger District in the last 10 or so years.

Comment: The PP cites Warren (1990) but ignores so much of the habitat analysis recommendations in that document.

Response: The Bonners Ferry Ranger District has used Warren's findings to develop analysis methodology for goshawk, and then refined them, based on findings from site-specific surveys. These surveys are available upon request. From Appendix B-27... Surveys have been done for most of the emphasis species on the Bonners Ferry Ranger District. The project file contains a list of surveys done on the Bonners Ferry Ranger District in the last 10 or so years.

Comment: The PP fails to disclose that wolverines and big-eared bats do in fact use habitat like that found in the project area.

Response: From page B-19...Townsend's big-eared bats have been found in a wide variety of habitats, from arid juniper/pine forests to high-elevation mixed-coniferous forests (USDA, 1989 pg. 38). Wolverines are low density, wide-ranging species that inhabit remote forested areas, ranging over a variety of habitats. Wolverines tend to use lower elevations in the winter and higher elevations in summer, when these areas provide the greatest potential for a food supply (Hornocker and Hash, 1981, pp. 1292-1296 & 1300).

Comment: The PP relies upon inadequate mitigation measures for the goshawk. Research suggests that it is essential to viability of goshawks that 20-50% of old growth within their nesting areas be maintained (Suring et al. 1993, Reynolds et al. 1992). USDA (2000) recommends that forest opening greater than 50-60 acres be avoided in the vicinity of goshawks. A least five years of monitoring is necessary to allow for effective estimates of habitat quality (USDA 2000). Research suggests that a localized distribution of 50% old growth should be maintained to allow for viability of goshawks (Suring et al. 1993).

Response: The Pipeline project area does not contain any old growth and the Bonners Ferry Ranger District has site-specific data regarding foraging and nesting habitat of local goshawks. Many nest sites and foraging areas are within existing timber sale units. Several of the territories on the BFRD are not in old growth. Large trees that have the ability to support the large nests of goshawks appears to be a greater predictor of nest site selection than the presence of old growth.

From Appendix B-27... Surveys have been done for most of the emphasis species on the Bonners Ferry Ranger District, to varying degrees. The project file contains a list of surveys done on the Bonners Ferry Ranger District in the last 10 or so years.

Comment: The PP makes unsupported claims of how goshawks are negatively affected by thick understories, and how logging will “fix” that situation.

Response: From B-34... Goshawks are more affected by stands that have heavy understory congestion, because it interferes with efficient hunting. If the understory is too sparse, prey have no hiding cover and are unlikely to be present in adequate numbers. Conversely, dense understory results in unsuccessful hunting as well as injuries to the goshawks.

From B-35... The majority of the known goshawk nests on this district are in stands that have had some type of timber harvesting. Many have skid trails directly beneath them. Commercial thinning tends to produce the kind of stand over time that this species prefers in that it reduces the number of stems but increases their diameter, and can reduce the amount of understory congestion as well. Since many stands on this district seem to be overstocked in the understory, this treatment would be favorable to this species.

Goshawk research literature supports the contention that goshawks are unable to use habitat with suitable overstory and too dense understory, believed to be because of availability of prey. On the site-specific surveys that have been done on the BFRD, no nest has been found in stands where the overstory is suitable but the understory is too dense. Speiser and Bosakowski (1987) and Crocker Bedford (1990) noted that a sparseness of shrubs and small trees appears to facilitate goshawk flight; Reynolds and Meslow (1984), Speiser and Bosakowski (1987), Reynolds (1989), and Gullion (1990) noted that the presence of such cover probably inhibits prey capture or conceals prey.

Comment: The PP makes a big game winter range a driving issue, despite the major lack of evidence that anything really needs to be done regarding whitetail deer habitat. Yet, compare the amount of analysis given for whitetail deer, an “abundant” species, vs. the amount of analysis provided for species that are known or suspected to be in decline because of logging and other management actions on the IPNF.

Response: The Pipeline project lies entirely within Management Area (MA-4) and the objectives from page (1-10) are: to manage big game winter range in order to provide sufficient forage for projected big game habitat needs. Scheduled timber harvesting should create more openings for forage to grow in and:

- Provide long-term growth and production of commercially valuable wood products.
- Provide cost effective timber production.
- Protect soil productivity.
- Meet or exceed state water quality standards.
- Provide for opportunities for dispersed recreation consistent with wildlife habitat needs.
- Meet visual quality objectives.

Notice the Beneficial Impact (BI) rating for the white-tailed deer in the table below given Alternative 2 or 3 is picked.

Please refer to this table on page B-40, 41.

It is noted that optimal habitat management for white-tailed deer is not necessarily in the best interest of other old growth species, therefore other species’ habitat needs, particularly those needing old growth or those needing habitat that has been reduced nationally because of fire suppression are also considered. However, white-tailed deer are a keystone species, upon which many wide-ranging carnivores such as wolves depend, as well as an important species socially. It is appropriate that they receive major consideration for habitat management. The level of analysis commensurate with level of risk.

SUMMARY OF CUMULATIVE EFFECTS FOR THE PIPELINE PROJECT

Table 4. Determination of Effects Summary, Bonners Ferry Ranger District, Analysis Area Scale.

Species	Alt. 1	Alt. 2	Alt. 3
<i>Endangered</i>			
Gray Wolf	NE	NE	NE
<i>Sensitive</i>			
Black-backed Woodpecker	BI	MI	MI
Fisher	NI	MI	MI
Flammulated Owl	NI	BI	BI
Harlequin Duck	NI	NI	NI
Northern Goshawk	NI	MI	MI
<i>MIS</i>			
Pileated Woodpecker	BI	MI	MI
White-tailed Deer	NI	BI	BI

NE= No Effect

MI = May impact individuals or habitat, but would not likely contribute to a trend towards Federal listing or loss of viability to the population or species.

BI = Beneficial Impact

NI = No Impact

Comment: The PP fails to justify treating project area forest as non-habitat for lynx and other species such as the marten. The Forest Service's programmatic Biological Assessment, the U.S. Fish Wildlife Service's subsequent Biological Opinion, and the Canada Lynx Conservation Agreement adopt the Lynx Conservation Agreement and Strategy (LCAS) as essentially part of each Forest Plan within the range of the lynx. The LCAS includes many forestwide standards and guidelines with which the IPNF must be in compliance before projects are approved. The LCAS also includes several project-specific standards and guidelines, also which the IPNF must comply with when performing NEPA analyses. We have seen little from the IPNF in terms of responding to these Forest Plan commitments for the Canada Lynx. The IPNF remains essentially in denial of the specifics needed for lynx recovery on the Forest.

Response: Please refer to the map on page 4-26 and notice that the Pipeline project area is entirely outside the Deer Skin LAU.

WATERSHED

Comment: Site specific surveys

The section on water resources mentions many "Issue Indicators" yet mostly fails to provide quantitative measures of those indicators.

See Table 4 on page B-64notice how the numbers address the issues by alternative.

Table 4
Comparison of Issues by Alternative

Issue	Alternative 1	Alternative 2	Alternative 3
Hydrologic Integrity (Rd. Density mi/mi ²)	4.9	4.8	4.8
Riparian Function Riparian Road Density (Rd. mi/mi ²)	2.9	2.85	2.85
Mass Failure and Erosion (road miles on sensitive landtypes)	1.9	1.9	1.9
WEPP Road Erosion Model (tons/yr)	31	29	29
Stream Crossings # of Crossings	14	15/14*	15/14*
Net Associated Risk (Tons/Acre)	30	16	16
Cumulative Effects (PFC Trend + = toward PFC 0 = neutral - = away from PFC)	0/-*	0/0*	0/0*
Water Yield (increase in ECAs in acres)	0	102	133

* short term/long term.

Comment: Table 4 (p. D-2): what are the numerical values of the natural range of ECA in the watershed, and what is the natural distribution of those ECAs, in terms of patch sizes, density of canopy, and upon what data do you make such project area-specific HRV determinations?

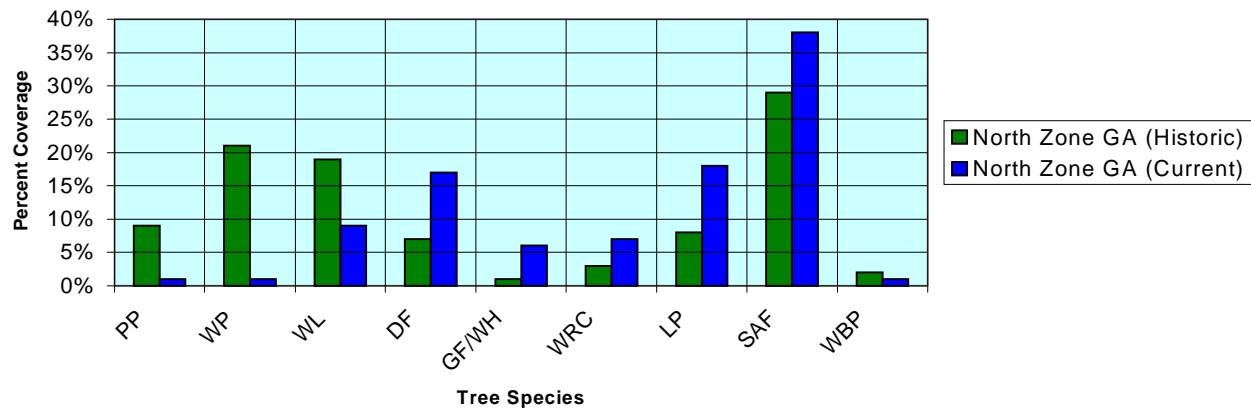
The project as designed also fails to mitigate or restore where Riparian Management Objectives are not currently being achieved, instead creating more adverse impacts within an RHCA.

Response: There is no way to derive hard numbers defining the HRV of ECA values in the Placer Creek Watershed. The forest structure and ECA openings were governed by fire before humans suppressed them. Using old aerial photos, fire studies, dendrochronology and the latest trend analysis data from the NZGA and the CRB Assessment findings (Chapter 3), one can see the effects of humans limiting fire on the landscape. Patch sizes and canopy densities are a function of fire effects and the fire cycle, as well as the spatial distribution of seral or climax stands. Overall, the stands in the Placer Creek watershed are trending towards closed canopy climax stands because of the lack of underburning, thinning or regeneration harvesting. The following graphs illustrate the changes in forest composition.

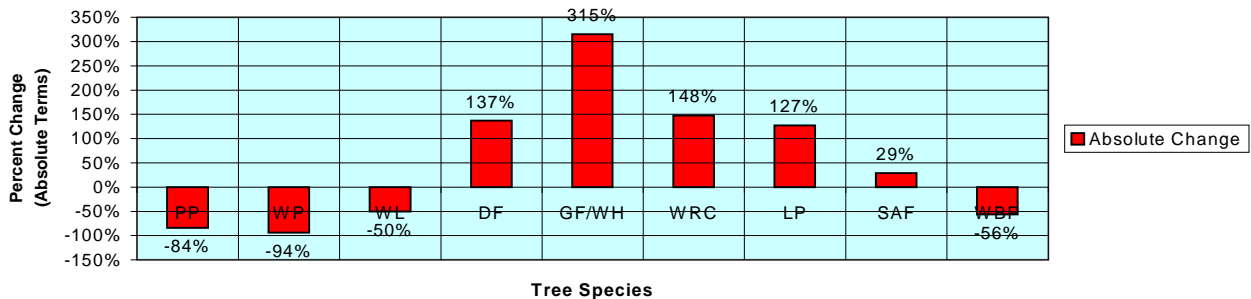
Forest Composition: Total North Zone Geographic Area (National Forest Lands)

Tree Species	PP	WP	WL	DF	GF/WH	WRC	LP	SAF	WBP
North Zone GA (Historic)	9%	21%	19%	7%	1%	3%	8%	29%	2%
North Zone GA (Current)	1%	1%	9%	17%	6%	7%	18%	38%	1%
Tree Species	PP	WP	WL	DF	GF/WH	WRC	LP	SAF	WBP
Absolute Change	-84%	-94%	-50%	137%	315%	148%	127%	29%	-56%
[(Current/Historic) - 1 = % Change]									

North Zone GA Conditions (Historic -vs- Current)



Changes in Forest Composition over Time (North Zone GA - Absolute Change)



Abbreviations

Ponderosa Pine - (PP)	Western Hemlock - (WH)
Western White Pine - (WP)	Western Red Cedar - (WRC)
Western Larch - (WL)	Lodgepole Pine - (LP)
Douglas-fir - (DF)	Subalpine fir - (SAF)
Grand fir - (GF)	Whitebark Pine - (WBP)

Notice the current trend with the decrease in seral species (PP, WP, WL) and the increase in shade tolerant species (DF, GF, WH, WRC). All species are trending outside the Historical Range of Variability (HRV), away from the Desired Future Conditions (DFC) listed in Chapter 1.

Hydrologic openings, measured as Equivalent Clearcut Acres (ECAs) are human caused opening in the forest. A measure used to describe decreases in canopy density over each area. A simplified example would be a 50 percent reduction of canopy over 100 acres would result in 50 equivalent clearcut acres. When analyzing ECA's for the project, the model described by George Belt in "Predicting Streamflow Changes Caused by Forest Practices Using The Equivalent Clearcut Area Model" (Belt, 1980) will be used. The ECAs will be used to compare alternatives (A-20).

Alternative 1 (No Action Alternative):

There are approximately 98 acres of openings in the current condition. The acreage would gradually decrease over 15 years as seedlings and saplings grow up and form a closed canopy.

Alternative 2 and 3 (Action Alternatives):

Equivalent Clearcut Acres would increase in the Placer Creek Drainage by approximately:

- 1) 102 acres for Alternative 2.
- 2) 133 acres for Alternative 3 (An increase of 23% over Alternative 2).

When compared to the current condition, the increase in ECAs would represent approximately:

- Three percent of the acreage of the Placer Creek watershed for Alternative 2.
- Four percent for Alternative 3.

This increase in ECAs would result in slightly increased peak flows in Placer Creek. A small temporary increase in peak flows may result from a reduction of canopy closure over the Placer Creek Watershed. Over time, the canopy closure would recover, particularly in the salvage and thinning units proposed for Alternative 2 (Ried,1993 pp. 60-61).

The PP states, "The risk of mass failure and erosion would be reduced under Alternatives 2 and 3" (page A-17). But just how significant this risk reduction is not disclosed. We can see that it really isn't significant, since impacts of other existing road problems were entirely ignored in the project design, the purpose and need development, and in the writing of the PP.

From B-60... The risk of mass failure and erosion would be reduced under Alternatives 2 and 3. Sediment delivery from the slumping cut bank on Road 2541 near Placer Creek would be reduced by road reconstruction proposed for completion as part of any action alternative. The No Action alternative or baseline information for the watershed can be found on B-50. Consequences of the no action alternative to Placer Creek are on B-56. Goals for improvement in watersheds are listed on B-51.

From B-65.... Compliance with INFS

Alternative 2 would protect riparian management objectives by maintaining recommended INFS buffers along the Moyie River and Placer Creek. (The recommended RHCA is 300 feet for a fisheries stream; 60 feet for intermittent streams and wetlands less than one acre; and 100 feet for wetlands over one acre.)

Alternative 3 would protect riparian management objectives by the use of riparian habitat conservation areas recommended by INFS.

Comment: The PP does not provide any quantitative information on the increased peak flows from the logging and road developments, merely dismissing it as “slight.”

The analysis of cumulative effects is woefully inadequate. To the extent that it relies on WATSED, a watershed model that has not been validated for the IPNF, it is misused in the PP. The PP also: 1) does not demonstrate conformance with the Forest Plan Fry Emergence Standard; 2) fails to adequately consider the project’s relationship to rain on snow; 3) does not disclose the IPNF’s failure to conform to Forest Plan monitoring standards; and 4) does not adequately disclose the cumulative effects of Forest Service and other Federal and non-Federal activities within the project area.

It is impossible to determine the extent of the project’s cumulative effects analysis because the listing and evaluation of federal and non-federal past, ongoing and foreseeable activities is incomplete. The BFRD must disclose whether the predictions of the impacts of past FS timber sales were consistent with the Findings Of No Significant Impact (FONSI) and/or no adverse cumulative effects as was projected in each EA that was published since the advent of the National Environmental Policy Act (NEPA).

Fine sediment in spawning gravels is a major limiting factor to fry survival. Spawning success is an extremely important factor in maintaining the viability of cutthroat trout populations. Placer Creek is suffering from high levels of fine sediment and if evaluated would not meet the Fry Emergence Standard.

Response: The IPNF Forest Plan provides six management goals, which apply to streams of this analysis area, (Page II-1, Items #8, 9, 11, 13, 18, 19). Among these goals are to “manage habitat to maintain populations of identified sensitive species of animals and plants: and to “manage fisheries habitat to provide a carrying capacity that will allow an increase in the Forest’s trout population”. That Plan states that the objective in forest fisheries streams is “to maintain 80 percent of fry emergence success: and that sedimentation arising from land management activities will be managed to meet this objective (IPNF Forest Plan, II-7). Appendix I further details: “In the event that cumulative effects of the proposed and past activities on stream sedimentation are projected to result in greater than a 20 percent reduction in fry emergence, a more detailed fishery/watershed analysis will be undertakenbefore the environmental analysis is approved ...”. The 1989 Forest Plan Evaluation and Monitoring Report documents the change away from use of the fry emergence standard (Item G-1, pages C-1 and C-2). The findings were that it was not a good monitoring tool to report stream health. G-1 was combined with an expanded G-3, which includes a more comprehensive array of fisheries and hydrology parameters.

Comment: The Forest Plan Appendix JJ requires validation monitoring. “Intergravel fines modeling– Compare stream intergravel fines with predicted values.” (Forest Plan Appendix JJ, p.4.) The intergravel fines monitoring is a necessary component in determining the fry emergence success. There is no reference in the PP to any validation monitoring that compared the existing situation with the predicted values as required by the IPNF Forest Plan.

The Forest Plan fish Standard is the only water quality/fishery numerical standard and threshold in the Forest Plan. Ignoring this standard allows the IPNF to proceed with repeated timber sales no matter how degraded the watershed. When standards and thresholds are ignored it makes no difference how high the sediment and water yield is, logging can still proceed. All the Forest Service has to do is say it is going to improve the watershed, and then proceed.

Response: Monitoring will be part of the Pipeline EA.

Comment: Without scientifically credible monitoring data, the FS’s judgments are based upon inadequate professional judgment. The FS conducts one timber sale after another, making optimistic predictions, yet the agency does not do the kind of responsible monitoring necessary to determine the accuracy of its predictions. It is this lack of monitoring and lack of adherence to Forest Plan standards and thresholds that is in large part responsible for the pervasive degradation of the watersheds and native fish populations on the IPNF.

Appendix JJ of the IPNF Forest Plan outlines the importance and procedure for Forest Plan Watershed monitoring.

The objective of the water quality monitoring program is to determine if land management activities implemented on the Idaho Panhandle National Forests are meeting Forest Plan standards, guidelines and objectives. Water quality monitoring is necessary to assure adequate protection of beneficial uses of water. Mandates for monitoring come from the National Forest Management Act, the Clean Water Act, and State of Idaho water quality laws and regulations. Monitoring is an essential element in the Memorandum of Understanding (MOU) between the Forest Service and State of Idaho. The MOU designates the Forest Service as the management agency responsible for water quality protection on National Forest System lands in the State of Idaho. (Appendix JJ, Idaho Panhandle National Forests Water Quality Monitoring Program, August 1989 at p. 1)

In order to demonstrate water quality protection, the implementation of monitoring plans will address three primary questions:

1. Are BMPs implemented as designed?
2. Are the BMPs effective in controlling nonpoint sources of pollution?
3. Are beneficial uses of water protected?

To provide answers to these questions, four monitoring categories will be utilized: 1) Baseline; 2) Implementation; 3) Effectiveness and 4) validation.

Baseline monitoring characterizes existing water quality conditions and long-term trends of stream systems. It also provides a control for monitoring and assessing activities. Implementation monitoring documents whether or not prescribed BMPs were implemented as designed and in accordance with Forest/Project Plan standards and guidelines. Effectiveness monitoring demonstrates if BMPs were effective in controlling pollutants to planned levels or resource management objectives. The intent is to focus on cause and effect relationships between land management activities and water quality. Validation monitoring evaluates whether coefficients, models and

Forest Plan standards are valid to meet policy, laws, and regulations.

Monitoring activities will be coordinated with other resources, primarily fisheries, to achieve cost effectiveness and efficiency in data collection, analysis, and interpretation.

However, in no case will the objectives and accuracy of the water quality monitoring plan be compromised [emphasis added]. Id.

3. Effectiveness Monitoring

Effectiveness monitoring will be done mainly: 1) where there are issues or concerns relating to unknown BMP effectiveness; 2) where the effectiveness of a specialized BMP is questioned...and 3) as a demonstration of a BMP's effectiveness. Effectiveness monitoring will be **quantitative** and utilize the least complicated measurements [emphasis added]. Id. at 3

Response: Compliance monitoring of BMPs is a responsibility of the Sale Administrator of the project. The IPNF Forest Monitoring Program design is beyond the scope of the Pipeline EA.

Comment: The Pipeline PP does not explain how Idaho Forest Practices Act compliance can be assured, when the conditions in Placer Creek watershed fail to meet BMP Standards.

Response: Site specific BMPs are included as part of project design and incorporated in the Project File. Idaho Forest Act BMPs, as well as these site specific BMPs would be incorporated into project design and would be monitored by the project sale administrator.

Comment: The PP fails to disclose the tons of sediment per year, or the risk of sediment, caused by all culverts and other sediment sources in the watershed.

Response: Table 4 on page B-64 provides a comparison of sediment delivery from roads (the primary source of sediment delivery to streams) and net associated risk (the risk of sediment delivery from stream crossing failure in tons of sediment per year) for each alternative.

Comment: "No effects from the past and current management are anticipated to act cumulatively with the no action alternative" (PP at B-57). So essentially, you are saying that previous actions have had no impacts on water quality. That's denial to a major degree.

Response: This statement is not intended to indicate that past management activities had no effect on water resources in Placer Creek, merely that the no action alternative would not act cumulatively with past, present, and foreseeable future activities to create an effect on water resources.

Comment: The PP ignores the fact that increased water yield exacerbates the impacts of excessive sediment and riparian roads (B-59).

Response: Though there could be a cumulative impact on stream channel conditions between increases in water yield, sediment and riparian roads, the minor increases in water yield (1%) is unlikely to affect stream channel conditions. Sediment delivery would be reduced as a result of improved road drainage, and riparian roads do not restrict stream channels except at

crossings. Inadequately sized crossings are addressed in the Environmental Consequences part of the watershed report.

Comment: The PP fails to define “high potential” and “moderate potential” (B-68-69) in terms of sediment delivery potential, and the significance of existing and proposed management activities on those areas.

Response: Sediment delivery potential as displayed in the map on page B-69 of the EA are based on the Idaho Panhandle National Forests Land Systems Inventory. The following is copied from “Erosion, Sediment Delivery, and Mass Failure Hazard Ratings”, a paper describing how hazard ratings were determined for landtypes on the North Zone of the IPNF.

B) Sediment Delivery Efficiency - is a rating of the relative probability of eroded soil reaching a stream channel and becoming sediment. These ratings consider slope gradient, delivery distance feet, slope shape, and other site specific factors.

Map units rated low are convex, non to weakly dissected slopes with gradients of 0 to 60 percent. These do not occur adjacent to streams and have a low mass failure potential.

Map units rated moderate are straight to concave and tend to concentrate runoff water. Included are areas having: 1) moderate dissection density, 2) single moderately incised draws, and 3) areas with slope gradients greater than 60 percent where dissections are absent or widely spaced.

Map units rated high have average slopes greater than 60 percent. Slopes are straight or concave. These units frequently consist of single draws or multiple closely spaced draws. The draws are deeply incised. Eroded soil must only be transported a maximum of a few hundred feet before entering a channel and becoming sediment. Floodplain map units adjacent to streams are also rated high. All soil disturbances within these map units occur near enough to channels to be a potential sediment hazard.

Comment: The PP fails to explain why so many listed Sensitive plant species are virtually ignored. It also fails to provide any sort of viability analysis where it does admit the potential of adverse impacts.

Response: Refer to B-96 ... On March 10, 1999 the US Fish and Wildlife Service provided the Idaho Panhandle National Forests (IPNF) with a listing of species (FWS 1-9-99-SP-158) which may be present in the Bonners Ferry Ranger District. The threatened species water howellia (*Howellia aquatilis* A. Gray) and Ute ladies'-tresses (*Spiranthes diluvialis* Sheviak) are suspected to occur in the district. Spalding's catchfly (*Silene spaldingii* Wats.) was proposed for listing as threatened in December of 1999. The extent of suitable habitat for this species in extreme north Idaho is unknown. No endangered or proposed Endangered plant species are known or suspected to occur within the district.

B-97... Features Common to All Action Alternatives

Several design criteria were established to minimize effects to natural resources during implementation of the proposed action (Features Common to all Action Alternatives). Site-specific Best Management Practices (BMPs) and Inland Fish Strategy (INFS) would be implemented to protect aquatic resources. Such protection measures include protection of any suitable habitat for water howellia and Ute ladies'-tresses which may occur in the analysis area. Restoration or maintenance that improves and enhances resource conditions for soil and water resources would be implemented "to the fullest extent possible".

Comment: The descriptions Placer Creek indicate that it ought to be on the State's 303(d) list. Has the IPNF submitted all its updated stream data to the State for consideration of WQLS status?

Response: Petitioning IDEQ for including a stream in the Idaho 303(d) list is beyond the scope of this project. IDEQ uses our stream data, along with other information, when they consider streams for listing or delisting.

Comment: Please prepare an EIS that remedies all the problems identified in this letter. The deficiencies are so many and the public needs a chance to comment on a supplemental document before a decision is made.

Thank you for considering these comments. Please keep each group on the list to receive all future communications regarding this proposal.

Sincerely,

Jeff Juel

and on behalf of:

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Sincerely,

STEVEN J. KOZEL
District Ranger

Enclosures

1. Socioeconomic Benefits

At each planning level (national, forest and project) the Forest Service must engage in environmental and economic analyses of its decisions as required by the National Environmental Policy Act. The Forest Service is required by law to manage national forest system lands and programs to maximize social and economic benefits for the American people. The economic analysis of the Pipeline Salvage Timber Sale fails to provide the public with a full and fair accounting of net economic benefits and fails to place any economic value on existing uses and functions of the sale area, including recreation, flood control, pest control, carbon sequestering and many other "ecosystem services". It also fails to consider a wide range of costs that will be incurred by the public through loss of these "ecosystem services" and other externalized costs such as increased flooding, increased risk of death, injury, and property damage from logging operations and increased fire risk.

Response:

Management of National Forest System Lands

The Forest Service is not required to "...maximize social and economic benefits..." The goals of Forest Service land management were recently restated in publication of the Final Rule for National Forest System Land Resource Management Planning (36 CFR parts 217 and 219, Federal Register, November 9, 2000.) "This final rule describes the framework for National Forest System land and natural resource planning... The final rule affirms ecological, social, and economic sustainability as the overall goal for managing the National Forest System lands and makes the maintenance and restoration of ecological sustainability a first priority for management of the national forests and grasslands so these lands can contribute to economic and social sustainability by providing a sustainable flow of uses, values, products, and services." (Final Rule Summary and Background Information.)

Other laws which govern National Forest land management planning include the Organic Administration Act of 1897 and the Multiple-Use Sustained-Yield Act of 1960 (MUSYA). The MUSYA confirms the Forest Service's authority to manage the national forests and grasslands "for outdoor recreation, range, timber, watershed, and wildlife and fish purposes" (16 U.S.C. Sec. 528), and does so without limiting the Forest Service's broad discretion in determining the appropriate resource emphasis or levels of use of the lands of each national forest and grassland. (Final Rule Summary and Background Information.)

The National Forest Management Act (NFMA) requires the Forest Service to manage the National Forest System lands according to land and resource management plans that provide for multiple-uses and sustained-yield in

accordance with MUSYA (16 U.S.C. 1604(e) and (g)(1)). In developing and maintaining these plans, NFMA calls for “integrated consideration of physical, biological, economic and other sciences.” (Final Rule Summary and Background Information.)

The National Environmental Policy Act of 1969 (NEPA), the Endangered Species Act (ESA) and other laws such as the Clean Water Act and Clean Air Act are all considerations in National Forest land management planning, analyses and decision-making.

Economic Analysis

The Policy section of the National Environmental Policy Act (NEPA) states that the NEPA process shall be used... “to emphasize real environmental issues and alternatives” and NEPA continues in the Scoping section with the process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action.

The public involvement and scoping, as well as the internal scoping, used for this assessment are described on page 2-1 of the EA. Economics and community stability are discussed as part of the “Other Resource Concerns” in Appendix A (page A-10).

Of the values mentioned in these comments, the most quantitative relates to the value of the timber that is proposed for harvest and the economics of logging within the county. Recent sales of timber on projects similar to this one are described on page A-10. The three sales discussed had an average selling price of \$130.66/MBF (million board feet). This exceeds the estimated \$42/MBF it costs the Ranger District to prepare a sale (Myrtle-Cascade DEIS, page A-5).

A Social and Economic Overview of Boundary County was prepared from information taken from the U.S. Census Bureau's Data and Quick Facts, and the Bonners Ferry Job Service Economic Profile, Fall 1999. This overview shows economic trends in the county. Timber and agriculture are the mainstays of the county. Ninety-four percent of the county's Manufacturing jobs are in Lumber and Wood Products. Although other types of employment and businesses are developing within Boundary County, they tend to have lower wages than the timber and agriculture jobs.

Value of Ecosystem Services

The values of what you call “ecosystem services” are more difficult to quantify. However, in a recent letter responding to comments by the National Forest Protection Alliance, the USDA Forest Service's Washington Office stated, “.. the ecological services and other benefits... were realized at the same time and often in the same national forest watersheds that were being used to provide

timber. Indeed many of these non-timber benefits were made possible by the construction and maintenance of roads through timber sales. Clearly not all benefits are simultaneously realizable from the same acres, but the resources of the national forests are such that, with proper management, at any given point in time they can provide multiple benefits – including timber. ... [The value of ecological services] are received each year even though timber harvesting was occurring in the United States and elsewhere. ... timber is a renewable resource and forests, with proper management, can be sustained along with their associated ecological services.” (Letter from USDA-FS Washington Office to John Talberth, Nov. 6, 2000)

That letter also contains the following information about the value of goods and services provided by the National Forest System.

... estimates show the economic value of recreation on national forests was \$6.8 billion in 1993, and will grow to almost \$12.7 billion by 2045.

... estimates are that over 18 million people fished in national forests in 1996, generating economic value between \$1.4 and \$2.9 billion.

... total economic value for hunting on national forests in 1996 was between \$1.3 and \$2.1 billion (1990 dollars) with 19.4 million recreation visitor days.

Public Costs due to Loss of Ecosystem Services

A comment similar to this is also discussed in the letter to John Talberth. In the discussion of maximizing net public benefits it points out that, “... there is no objective way to determine when this goal is being achieved – too many relevant factors cannot be quantified, let alone expressed in monetary terms. ... The Congressional Research Service in a paper on below-cost timber sales ... states ‘net public benefits cannot be calculated, and are assumed to be determined through public participation in national forest planning.’

It is not anticipated that the Pipeline project will not result in any public costs due to increased flooding, increased risk of death, injury or property damage from logging operations and increased fire risk. Page A-16 of the EA explains, “When compared to Alternative 1 (No Action), the hydrologic integrity would be improved under Alternatives 2 and 3.” Thus lessening the chance of flooding. Logging operations are conducted under Forest Service contractual safety requirements as well as National OSHA standards. The project has been designed with a high level of consideration for potential effects on the resources in the area. One of the goals of this project is to reduce the intensity of wildfires in the project area (EA page 1-2). The activities will reduce the amount of fuel available to start or feed a wildfire and will begin to establish vegetation more characteristic of what grew historically in the area.

2. Value of Unlogged Forest

The dollar value of undisturbed forest or standing timber should have been calculated and used in the analysis of economic costs. The value of “ecosystem services” provided by standing forests has never been evaluated and compared with their value as lumber.

Response:

See the above response to Value of Ecosystem Services.

3. Range of Alternatives.

A non-commercial restoration alternative should have been analyzed.

Response:

Alternatives that were considered but eliminated from further detailed analyses are described on pages 2-18 through 2-20 of the EA. Two options for meeting the goals and objectives of the ecosystem work without harvesting any timber were evaluated. Both involved use of prescribed fire to meet the silvicultural objectives of the area while staying within the needs of the other ecosystem resources. These alternative scenarios presented an unacceptable risk to public and private land because of the high to very high potential for an escaped wildfire. It was also estimated that smoke emissions would be excessive, soils could be damaged, and wood fiber that could be utilized as forest products would be wasted. Funding for such projects is highly competitive under the current budget projections. For these reasons, the alternatives were eliminated from further study.

4. Species viability.

The Pipeline Timber Sale includes activities that are likely to jeopardize the viability of species that find optimal habitat in forest with well-developed structures, and forests naturally disturbed by fire, disease and insect pathogens.

Response:

As stated on page 3-15 of the EA, the Desired Condition for the area includes the goal of “trend[ing] the area toward forest composition and structure levels that existed historically in the area.” Optimal habitat is provided in healthy forests and sustainable ecosystems where conditions are similar to what occurred historically.

The wildlife portion of the Biodiversity discussion in Appendix A describes the expected effects of the activities associated with this project. Six threatened,

endangered or recently delisted species occur on the Bonners Ferry Ranger District – woodland caribou, grizzly bear, gray wolf, bald eagle, lynx and peregrine falcon (delisted August 25, 1999). There would be no direct, indirect, or cumulative effects on any of these species.

The following effects were predicted for the Pipeline Project if the Preferred Alternative (#2) were implemented. (Pages B-40 and B-95 of the EA)

Species	No effects	No Impact	Beneficial Impact	May impact individuals or habitat, will not likely contribute to a trend toward Federal listing or loss of viability to the population or species.
Sensitive:				
Flammulated Owl			xxx	
Black-backed woodpecker				xxx
Fisher				xxx
Harlequin Duck		xxx		
Northern Goshawk				xxx
Management Indicator:				
Pileated Woodpecker				xxx
White-tailed Deer		xxx		
Threatened Endangered:				
White Sturgeon	xxx			
Bull Trout	xxx			
Gray Wolf	xxx			
Burbot		xxx		
Interior Redband Trout		xxx		
Westslope Cutthroat Trout				xxx if present
Torrent Sculpin				xxx if present

5. *Cumulative Effects.*

The Pipeline Salvage EA avoids the required analysis and ignores contributors to cumulative effects such as increased OHV use, increased risk of fire, grazing, etc.

Response:

The Cumulative Effects of this project are described on page 4-18 through 4-27 of the EA. The activities considered in these analyses included the following:

- Aspen regeneration through a recommended KV project;
- Pre-commercial thinning and weed/release of juvenile trees through recommended KV project;
- Ecosystem burn through a recommended KV project;
- Potentially overlapping areas of the proposed District-wide Salvage EIS;
- Potentially overlapping areas of the proposed District Overstory Removal EA;
- Potentially overlapping areas of current National Forest Lands Timber Sales.;
- Timber Harvest on adjacent private lands;
- Potential reactivation of Gravel Pit by Boundary County Road and Bridge Department.

Comments from the Kootenai Environmental Alliance

1). Cumulative Effects Analysis Area (CEAA):

2). Timber Sales:

Comment:

It does not appear that the EA considered the logging units outside the project area boundary when the Cumulative Effects Analysis process was used regarding impacts to watersheds and fisheries from the proposed logging of 550 acres.

There is no mention of the Perkins-Goat 1988, Skin Creek 91 or Placer Creek timber sales. The final EA should clearly indicate the cumulative impacts as defined by NEPA at 40 CFR 1508.7, and the effects 1508.8, both direct and indirect, were fully analyzed regarding the combined environmental effects for logging units that are within and adjacent to boundaries of the Analysis Area.

Comment: Concerning the three past timber sales within the Analysis Area, the Final EA should indicate how many acres were clearcut within the Analysis Area from the three sales. List the names of the timber sales and date sold.

Response to 1 and 2: Compiling a list of the past timber sales would become a paper chase at best and not address NEPA related cause and effect relationship of the issues at hand. Existing timber sale units (regardless of their stature) within the Placer Creek watershed boundary (Compartment 739) and their cumulative effects on a resource(s) are all summed up in the existing condition section (Chapter 3 in the Pipeline EA). Chapter 3 of the EA “describes the current condition of the resources as related to the primary issues. These issues represent components of the environment that would affect, or that could be affected by the alternatives if they were implemented. *The changes that have occurred (i.e. previous timber sales and harvesting activity) throughout the analysis area are inherent in these discussions.* Chapter 4 describes the *probable environmental consequences* of implementing the alternatives described. This chapter also provides the cumulative effects of past, ongoing and proposed activities in the analysis area.

3). Water/Culverts/

Comment: There are a number of issues that are confusing regarding water issues. Page A-20 states that there are approximately 98 acres of openings in the current condition, regarding ECA's. Page D-2 under Table 4 shows that for Placer Creek the existing condition is 474 acres that are listed as ECA's. Please define.

Response: On page A-20 under the Alternative 1 heading, the 98 acre figure is the number of acres in the *project area* in seedling and / or sapling condition that constitute openings. The number would decrease over the next fifteen years as the seedling / sapling stands grow into larger trees and form a closed canopy. The 474-acre figure in Table 4, page D-2 is the number of openings in seedling / sapling stands in the *Placer Creek Watershed*.

Comment: The Placer Creek watershed is described as being 2496 acres in size and it is indicated that 59 % of the watershed is in a rain-on- snow zone, page A-18.

Response: Though 59 percent of the Placer Creek watershed is in the rain-on-snow zone between 2,500 and 4,500 feet, most of the Pipeline Project is below this zone. A total of 130 acres is proposed for harvest in the rain-on-snow zone in both action alternatives. Units 7, 8, 9, and 10, as well as 45 acres of Unit 6, and 6 acres of Unit 10 are in the rain-on-snow zone. Approximately 30 ECAs would be harvested in the Rain-on-snow zone in Alternative 2, and approximately 45 ECAs for Alternative 3.

Comment: On page B-48 the 36" culvert is listed as undersized. How do you derive this? There is no explanation in the EA as to why so much water is flowing out of the 2496-acre watershed.

Response: The 36-inch culvert listed as undersized is Crossing #11 on the Pipeline EA Project Area Stream Crossings Map on EA page B-66. This crossing drains approximately 2105 acres (project file). The 7.1 cfsm is actually a mean flow figure generated by WATSED (project file). Actual peak flows range from a Q2, or estimated peak flow at a 2-year return interval (roughly corresponding to bankfull flows) of 138 cfs to a Q100, or 100-year peak flow, of approximately 238 cfs (project file). These numbers were generated with the use of a culvert risk spreadsheet developed by Dale Deiter, former Bonners Ferry District Hydrologist. Flows are estimated based on rating curves derived from local gauging station information. Using this data, the 36-inch culvert has a virtual certainty of failing within its designed 20-year life.

Comment: There is insufficient analysis and data in the EA regarding how 550 acres of new logging and new canopy openings would not cause any increases in peak flows in the Placer Creek watershed, especially during rain-on-snow events. Which models did you use for water yield analysis? Due to the sediment problems in Placer Creek, it is important that accurate data is available regarding bedload movement.

Response: Total proposed timber harvest in the Placer Creek watershed (*eastern ½ of the analysis area*) is approximately 250 acres. The ECA value for Alternative 2 in the Placer Creek

Watershed is 102 acres (EA page B-58). The ECA value for Alternative 3 is 133 acres (EA page B-61).

The WATSED model predicts a short-term water yield increase of one percent for three years over the existing condition for Alternative 3 and no increase for Alternative 2 (project file). These numbers cannot be used as an absolute measure as WATSED is best used to compare effects of alternatives. However, the WATSED values do indicate only a small change in flows based on timber harvest.

The WEPP Road model was used to estimate sediment delivery from roads for each alternative. The estimated sediment delivery from roads to streams in the Placer Creek Watershed is 31 tons/yr. Due to road drainage improvements, sediment delivery from roads would be reduced to 29 tons/yr with either action alternative (project file).

Response: The major sources of sediment are the Deer Ridge Road, Road 2540, and Road 2541. Road 2540 is within 20 to 50 feet of Placer Creek for approximately one mile. This segment of road delivers about 10 tons/yr of sediment to Placer Creek. Road 2541 has no drainage relief for approximately 2,000 feet and drains directly into Placer Creek. The WEPP Road model predicts over 20 tons/yr of sediment delivered from this road segment (EA page B-48).

As is normal for any stream channel, bedload would tend to move at peak flows. Sediment in Placer Creek would be routed through the system to the Moyie River over time. The small expected increase in peak flows would route this material slightly more quickly than under the No-Action Alternative.

4). Economics

Comment: Page A-10 lists three timber sales with no corresponding sell dates. The final EA should supply analysis and data regarding whether either action alternative would be below cost given the current depressed lumber market.

Response: Good Grief Addie was awarded on 9/15/99 with an advertised rate of \$ 135/MBF and sold for \$161.00/MBF. Katamount was awarded on 10/27/98 with an advertised rate of 105/MBF and sold for 109/MBF. Rock Bottom was awarded on 6/16/97 with an advertised rate of 101/MBF and sold for 122/MBF. Timber generated from the Pipeline EA will be advertised for approximately \$133/MBF and will likely be bid up to over \$200/MBF

5). Fire

Comment: Page 4-27 mentions severe stand replacement fire and urban interface scenarios. Is there information in the project file about the proximity of structures in relation to the project area?

Response: There are an estimated eight structures within a mile south and west of the project area.

6). Vegetation

Comment: The final EA should include TSMRS data with a breakdown of the estimated percent of trees < or > 7" dbh that would be logged under both action alternatives.

Response: No precise estimates of trees per acre harvested by size class and species was made. The resource specialists (botanist, silviculturist, hydrologist, wildlife biologist, and fisheries biologist) conducted their effects analysis in the EA based on changes in tree species composition and forest structure (canopy cover and size classes of the vegetation) *before and after harvest, for each alternative.*

Comment: Please provide the stand exam data from in and around the project area if it newer than five years.

Response: The district has stand exam data available from the early 1990's through 2000. Keep in mind that numerous field trips were made by the specialists, concerned public and project leader to assess stand conditions and develop the project using current conditions.

Comment: The Final should provide volume estimates for this project and the target volumes for 1999-2001.

Response: Refer to the goals and objectives of the EA. Volume production is not an issue, nor does it drive any alternatives. Remember, the Forest Service is mandated by law to manage public land using multiple use techniques, therefore timber production is merely a by product with projects such as the Pipeline EA.

Comment: Concerning the 674 acres of private land listed on page 3-19, is there data regarding how many of the 187 acres are clearcuts. Is it therefore correct that there are no indications the remaining 487 acres will be logged within the next several years?

Response: Most of 187 acres have been heavily logged. The majority of the understory (< 7" dbh) was left. The current and projected condition of the adjacent private lands was considered in the EA, especially with the big game winter range issue (page 4-20).

7). Road Construction

Comment: The EA does not indicate the year that roads 2540, 2541 and, 2781 were built, or their respective NEPA documents if built after 1970.

Response: Road 2540, 2541 were constructed before 1970. Road 2781 was constructed using the Pipeline and Orser Creek documents in the 1980's.

8). Fisheries

Comment: “There is no data in the 4 page fisheries analysis that would show whether the WCT population has been increasing, or decreasing due to the 3 timber sales mentioned on B-93.”

Response: The U.S. Forest Service monitors presence/absence of fish species and when available, relies upon multiple sources of outside information to support population density estimates (e.g. Idaho Department of Fish and Game (IDFG)). There is no known population data for Placer Creek at this time. The population of WCT in Placer Creek is a resident population since -a migration barrier exists at its confluence with the Moyie River. On page B-95, the document states, “. . . a reduction of sediment delivery risk and improvement in the trend toward channel stability for Placer Creek is expected.” These are both improvements in habitat parameters and we anticipate fish populations to remain stable in the Placer Creek drainage.

Comment: “There is also no data supplied regarding the percent of bedload that is moving annually in the Creek. There is no analysis or data that would show that the high flows moving in the Creek are not also moving bedload and thus negatively impacting the WCT habitat.”

Response: The WATSED model predicted no net increase in water yield for the preferred alternative (Alternative 2) and only a one percent increase for three years for Alternative 3. This slight increase is likely within the historic range of variability; therefore, bedload movement can also be expected to stay within the historic range of variability.

The last two paragraphs on page B-94 and the rationale provided on page B-95 discuss cumulative effects from upgrading two culvert crossings, bank stabilization efforts, and installing ditch relief culverts. The short-term sediment pulse from replacing and improving these crossings will represent a reduction in risk over the long term in the possibility of a mass failure event if not upgraded. Streamflow regulates the amount of spawning area available in any stream by regulating the area covered by water and the velocities and depths of water over the gravel beds (Bjornn and Reiser, 1991). As a consequence, of the small amount of silt/sediment that would enter the stream during reconstruction efforts this resulted in the effects call, “may impact individuals, but will not likely result in a trend toward federal listing or reduced viability for the populations.”

Literature cited:

Bjornn, T.C. and D.W. Reiser. 1991. Habitat Requirements of Salmonids in Streams. American Fisheries Society Special Publication. 19:83-138.

U.S.D.A. Forest Service. 1995. Inland Native Fish Strategy Environmental Assessment Decision Notice and Finding of No Significant Impacts